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FINAL Subsurface Investigation Report

Former Wilsonart International, Inc. Warehouse Congers, New York

Volume 2 of 2

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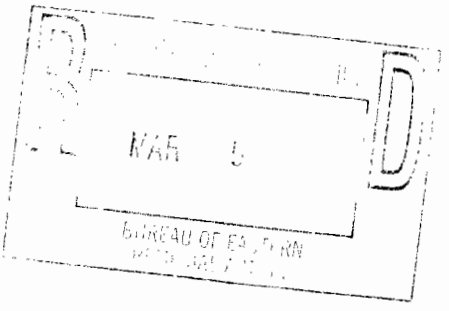

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APPENDICES

APPENDIX A

WORK PLAN, SUPPLEMENTAL WORK PLAN, AND ASSOCIATED CORRESPONDENCE

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Subsurface Investigation Work Plan

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1.0 INTRODUCTION

1.1 GENERAL

Wilsonart International, Inc. (Wilsonart) has opted to participate in the "Investigation and Remediation" type of voluntary agreement of the Voluntary Cleanup Program (VCP). This action supersedes the previous VCP Application submitted by Lester, Schwab, Katz & Dwyer, LLP on November 22, 1999. At the request of Wilsonart, Earth Tech has prepared this work plan to perform a focused subsurface investigation at Wilsonart's former storage and distribution warehouse, located in the hamlet of Congers, Rockland County, New York (Figure 1). The purpose of the investigation is to compile and develop factual information to address Wilsonart's contention that the trichloroethene (TCE) impacted groundwater detected on-Site is the result of an off-Site source(s) unrelated to Wilsonart's past use of the property. The proposed activities include the compilation and review of existing data, completion of an on-Site Subsurface Investigation (SI) in accordance with a NYSDEC-approved Work Plan, and preparation of a Report that summarizes the results of the SI.

The 4.81-acre parcel consisted of vacant land until 1969. The vacant land was owned by Karl F. Kirchner, Mike Wallace and Jerome Johnson. The aforementioned individuals were named as "Owners" in a Declaration of Restrictive Convenents dated August 13, 1963 (Lester, Schwab, Katz & Dwyer, LLP, November 1999). These individuals subsequently formed the partnership, Congers Associates. The whereabouts of these individuals or the partnership is not known. Premark International, Inc. (a.k.a. Ralph Wilson Plastics Division, Wilsonart) acquired the title of the property (by deed) on June 19, 1968 from Congers Associates, Inc (Recorded: July 12, 1968: Liber 845, cp 810).

Premark International, Inc. built one 30,000-ft^2 warehouse building in 1969. Wilsonart is a manufacturer of surfacing materials for countertops, cabinets, tub and shower surrounds, commercial fixtures and flooring. This facility served the northeastern United States and was used only for storage and distribution purposes. Wilsonart suspended operations at this location in December 1994.

Hudson Technologies, Inc. (HTI) of 275 N. Middletown Road, Pearl River, New York 10965 leased the property from Wilsonart between February 4, 1997 and August 1, 1999 to operate an aerosol packaging service facility. HTI surrendered the leasehold premises to Wilsonart by mutual consent of the parties on August 1, 1999.

The Site is currently inactive. In November 1999, Illinois Tool Works, Inc. (ITW) of Glenview, Illinois purchased Wilsonart. Ownership/Leasing history is detailed below:

Prior to June 19, 1968	Lands owned by Congers Associates of Great Neck, New York
June 19, 1968 to December 1994	4.81-acre parcel acquired by Rexall Drug and Chemical Co., Inc. of Los Angeles, California; lands occupied by Premark International, Inc., Ralph Wilson Plastics Division (a.k.a. Wilsonart International of Temple, Texas)
February 4, 1997 – August 1, 1999	Building leased to HTI of Pearl River, New York
November 23, 1999	ITW acquired Wilsonart and obtained title to the parcel.

The NYSDEC has raised a concern regarding the presence of volatile organic compounds (VOCs) detected in groundwater on the property, and has requested an additional investigation. The SI outlined in this work plan was developed to provide data to address the NYSDEC's concerns, which were

summarized by Mr. Dale A. Desnoyers (NYSDEC Chief, State Superfund and Voluntary Cleanup Bureau) in a January 12, 2000 letter to Mr. Ronald S. Pordy (Lester, Schwab, Katz & Dwyer, LLP of New York, N.Y.). This work plan provides for the investigation of soil and groundwater quality to determine the source of groundwater impacts, define limits of potential soil and groundwater impacts, and further characterize groundwater flow conditions.

1.2 PROPERTY DESCRIPTION AND BACKGROUND

The former Wilsonart warehouse is located at 1 Brenner Drive west of Route 303, in the western portion of a commercial and industrial area in the hamlet of Congers, Town of Clarkstown, Rockland County, New York. As mentioned previously, Wilsonart used the warehouse exclusively for storage and distribution purposes. The 4.81-acre property was acquired by Wilsonart in 1968 and consists of a building (25%), parking lot (10%), lawn (5%) and wooded areas (60%). The footprint of the warehouse building is approximately 30,000 square feet with approximately 20 percent allocated for office space. The warehouse, which was built in 1969, consists of steel frame and masonry construction with poured concrete floors. Three large loading docks are present along the eastern side of the warehouse building. A glue room located in the southwest corner of the warehouse building; was used to store adhesive materials.

The Site is bounded by a sanitary sewer easement (Rockland County Sewer District No. 1), Conrail (CSX) and residential properties to the west and by a drainage easement and Sturz Enterprises, Ltd. to the north. To the east are commercial/light industrial-zoned lands owned by Rendahl Corp., Diversified Properties, Inc., Precious Realty, Inc. and several other commercial / light industrial businesses. The Site is bound to the south by undeveloped, vacant land, owned by Denlo Realty Corp., and residential properties.

Wilsonart discontinued operations at the warehouse in December 1994. No orders, decrees or other legal documents regarding violations of the Environmental Conservation Law or equivalent federal environmental statutes are known to have been received by Wilsonart.

According to Mr. Jerry Brickwood, Town of Clarkstown Sewer Department, there is no documentation that the Site was connected to the Town's Sewer District 35 - Contract B (August 14, 2000). Rockland County Sewer District 1, which also provides service adjacent to the Brenner Drive area, was also contacted regarding connections to the Site. According to Mr. Martin Dolphin, the 1 Brenner Drive property occupants (Wilsonart and HTI) had no Industrial Pretreatment Permits with the Rockland County Sewer Department (August 14, 2000). This suggests that the Site may not be connected to the County Sewer District 1. Further review of this subject, via the Freedom of Information Law, would document existing and historic on-Site stormwater and sanitary waste management practices at the Site.

1.3 PRIOR USES/CONTAMINATION OF THE PROPERTY

"Greenfield Site" (Prior to June 19, 1968)

Parcel was vacant with no improvements.

Wilsonart Occupancy (June 1968 – December 1994)

During Wilsonart's occupancy, the former warehouse facility included inventories of laminate, and flammable and non-flammable adhesives. The flammable and non-flammable adhesive products were manufactured in Temple, Texas and were temporarily stored inside the warehouse in 55-gallon drums, 5-gallon pails, 1 gallon cans, 1 quart cans and 1 pint cans. Based upon review of operational history and

inventory records the following chemicals were used to manufacture these items: lactol or heptane, toluene, MEK, acetone, hexane, methanol, and 1,1,1-trichloroethane (TCA). A summary of chemical inventory is provided in Table 1. Trichloroethene (TCE) was not used to manufacture the adhesive materials stored at the former Wilsonart warehouse facility.

Diesel fuel was stored in one 12,000-gallon underground storage tank (UST) and one 6,000-gallon UST located north of the warehouse. The USTs were installed in 1974 and were removed, along with all associated pumps and piping, in October 1987 (Appendix A). Tank Tech performed the removal according to state guidelines in place at the time. After the tanks were removed, Mr. Bob Patterson (Rockland County Department of Health, Division of Environmental Health) inspected the excavation. No evidence of leakage from the USTs was reported (Rockland County Health Department, 1987). Clean fill was used to backfill the tank excavations.

In February 1985, the Rockland County Department of Health, Division of Environmental Health issued three violations (Appendix B). The violations are listed below:

1. Emergency Plans, floor plans, and hazardous material inventory statement were not submitted to RCDOH or were maintained on premises;
2. Portable containers not properly stored or handled; and
3. Required posting or labeling not present or satisfactory.

Hudson Technologies, Inc. Occupancy (February 4, 1997 – August 1, 1999)

HTI (HTI) of Pearl River, New York leased the parcel from Wilsonart to house its Congers, New York production facility for its aerosol packaging line. HTI, which provides on-Site refrigerant recovery, reclamation and management services along with a full stock of various refrigerant types, announced the closure of its Congers, New York facility on August 11, 1999.

HTI was contacted to provide information relating to the chemical inventory stored and used during their occupancy of the Site (Appendix C). According to Mr. Stephen P. Mandracchia, Executive Vice President of HTI, the following chemicals were used and/or stored at various times and in varying quantities:

- Dichlorodifluoromethane (R-12);
- Tetrafluoroethane (R-134a);
- Chlorodifluoromethane / 2 methyl propane / chloro-1,1-difluoroethane mixture (R-406a);
- Chlorodifluoromethane (R-22);
- Chlorodifluoromethane & Chloropentafluoroethane mixture (R-502);
- 2,2 dichloro-1,1,1-trifluoroethane (R-123);
- Welding gases consisting of Acetylene, Argon, Oxygen and Carbon Dioxide;
- Liquid Nitorogen; and
- Small containers of various and miscellaneous cleaning solutions.

1.4 PREVIOUS INVESTIGATIONS

The following investigations have been performed on the subject property. Listed below are details that pertain to the environmental assessment of the Site:

1. Environmental Products & Services, Inc. (EP&S), Phase 1 Environmental Site Assessment – 1 Brenner Drive, Congers, New York 10920, prepared for Hudson Technologies, Inc, March 2, 1998.

HTI, which expressed an interest in purchasing the property from Wilsonart, hired EP&S, a remedial firm, to prepare a Phase 1 Environmental Site Assessment (ESA) of the subject property. Conclusions made by EP&S were:

- Site is not connected to the public sanitary sewer system;
- Suspended ceiling tiles may contain asbestos in the office and maintenance area of building;
- Lead-based paint was observed in various portions of the building;
- Two debris piles were observed exterior to the building;
- Inspection of the glue room, used to store laminate materials, revealed spillage;
- No underground storage tanks (USTs) were observed on the Site. Records reviewed indicate that two fuel oil USTs were removed in October 14, 1987 (Earth Tech's review (April 2000) indicated that two diesel fuel USTs (one 12,000-gallon and one 6,000-gallon) existed on-Site between 1974 and 1987) existed along the exterior of the northeastern corner of the Site building); and
- NYSDEC files reviewed indicated that 40 documented spills have occurred within ¼ to ½ mile of the Site (Earth Tech's later review (April 2000) indicated that the environmental database search was incorrectly centered on 100 Brenner Drive. The Site is located at 1 Brenner Drive, approximately 1/4 mile to the west.).

EP&S recommended that a Phase II subsurface investigation be performed.

2. Environmental Products & Services, Inc., Phase II Subsurface Investigation – "100" Brenner Drive, Congers, New York 10920, prepared for Hudson Technologies, Inc., August 31, 1998.

EP&S installed and sampled three 30-foot deep monitoring wells (MW-1, MW-2 and MW-3) to evaluate if there were any potential environmental impacts from former Wilsonart operations. Particular emphasis was placed on the loading dock area, septic tank/leachfield area and former fuel oil USTs area. Conclusions formulated by EP&S are listed below:

- Volatile Organic Compounds (VOCs) were detected at or above NYSDEC guidance values for groundwater in all three wells. While minor amounts of petroleum VOCs were evident, the majority of the VOCs detected reportedly came from sources such as solvents and degreasers.
- Direction of groundwater flow at the Site was reported as east-northeast to the west-southwest.
- The petroleum and chlorinated solvent-impacted groundwater was "allegedly" due to former operations at the Wilsonart facility. This statement had no factual or technical substantiation.

3. Earth Tech, Inc. (Earth Tech), Supplemental Phase II Investigation Letter Report – Former Wilsonart Facility, "100" Brenner Drive, Congers, New York 10920, prepared for Wilsonart International, Inc. November 14, 1998.

Earth Tech performed an investigation for Wilsonart to further delineate Site conditions, define the possible source of groundwater VOC impacts at the Site and to assess the possibility of off-Site sources. Field activities included:

- Surveying;

- Collection of 26 passive soil gas samples, which were strategically placed throughout the Site. The samples were analyzed for VOCs by United States Environmental Protection Agency (USEPA) Method 8260 (Figure 2);
- Installation of one overburden monitoring well and two bedrock monitoring wells to provide additional geologic, hydrogeologic and environmental data. Selected subsurface soil samples were analyzed for VOCs by USEPA Method 8260; and
- Following development, the three existing wells (MW-1, MW-2 and MW-3) and three newly installed wells (MW-4, MW-5 and MW-6) were sampled for VOC analysis (Figure 2).

Conclusions drawn by Earth Tech included:

- Direction of groundwater flow on the Site, as observed on October 21, 1998, is generally westward with a slight flow divide along the western edge of the Site (Figure 3).
- The presence of the flow divide appears to indicate that the source of the VOC impacts in groundwater is located east of the Site.
- Wilsonart is not the likely source of the VOC impacts due to the following findings:

  a) VOCs not detected in the overburden, either from passive soil gas sampling or subsurface soil testing;
  b) VOCs were not detected in groundwater within the shallow overburden;
  c) Soil gas samples, soil boring samples and groundwater samples collected near potential former source areas (i.e., glue room and septic/leach field) were all non-detect for VOCs.; and
  d) The highest TCE concentrations in the bedrock water-bearing zone occur in wells MW-3 (494 micrograms per liter (ug/L)) and MW-5 (160 ug/L). The highest 1,1,1-Trichloroethane (TCA) concentrations in the bedrock water-bearing zone also occur in wells MW-3 (63 ug/L) and MW-5 (20 ug/L). The NYSDEC groundwater standard for TCE and TCA is 5 ug/L. These monitoring wells (MW-3 and MW-5) appear to be upgradient of the other existing monitoring wells (MW-1, MW-2, MW-4 and MW-6) at the Site. A summary of analytical results is provided in Appendix D of the attached Work Plan.

- No Freon compounds, which were packaged by HTI, were detected in any soil and/or groundwater sample.

1.5 PROJECT SITE

For the purposes of conducting this investigation under NYSDEC's Voluntary Cleanup Program (VCP), Wilsonart elects to define the "Site" as the entire 4.81-acre parcel (Tax Map Section No. 128, Block A, Lot 5.08). Based on previous groundwater monitoring conducted at the property, the direction of groundwater flow, within the Site boundary, is westward. The Site thus primarily includes the portion of the property that is hydraulically downgradient of impacted wells MW-3 and MW-5.

2.0 SCOPE OF WORK

2.1 GENERAL

Several activities are planned to assess potential environmental impacts to the property and the extent of the known VOC-impacted groundwater. To the extent possible or practical, the activities will be conducted in a sequential manner. Depending on the results obtained from each activity, and on input from NYSDEC, NYSDOH and Rockland County DOH, Earth Tech may recommend modifications to subsequent activities.

A subsurface investigation will be conducted, and will include the collection of soil and groundwater samples. The purpose of the investigation is to compile and develop information to address Wilsonart's contention that the VOC-impacted groundwater on-Site is the result of an off-Site source(s) unrelated to Wilsonart's use of the property. Wilsonart intends to achieve a release or "covenant not to sue" for the entire Site and, ultimately, sell the Site as a commercial property. A summary of the scope of work is as follows:

- Perform Site walkover;
- Review environmental records;
- Perform focused water well survey;
- Review available aerial photographs;
- Develop Site vicinity map;
- Excavate and field screen up to five test pits;
- Collect and analyze a minimum of four soil samples during the test pitting program;
- Collect and analyze surface water/sediment upgradient of impacted well MW-3, if encountered;
- Drill and field screen two soil borings/rock corings;
- Collect and analyze a minimum of four subsurface soil samples from the two borings;
- Install two bedrock groundwater monitoring wells;
- Develop the newly installed monitoring wells;
- Monitor water levels and collect a sample from all on-Site groundwater monitoring wells;
- Slug test the monitoring wells to evaluate the hydraulic conductivity of the upper bedrock water-bearing zone; and
- Survey locations and elevations of newly installed monitoring wells.

If the data generated are not adequate to demonstrates the off-Site origin of TCE [or not sufficient to assess the potential exposure by off-Site receptors, it may be necessary to collect additional samples at off-Site locations].

Details of the work activities that will be conducted are provided in the following subsections. Detailed Standard Operating Procedures (SOPs) for carrying out these activities are provided in Appendix E.

2.2 DATA COMPILATION AND REVIEW

2.2.1 Site Inspection

Representatives from Wilsonart and the NYSDEC will accompany Earth Tech during the Site walkover. Earth Tech, Wilsonart and the NYSDEC will stake the proposed locations of test pits and soil borings/monitoring wells prior to mobilization. Proposed test pit and soil boring/monitoring well locations are shown on Figure 4. These proposed locations were selected based on the documented past

land uses and Site activities; access and geographical considerations, and the data gaps remaining from previous investigations.

Earth Tech will also inspect accessible portions of the property and from public right-of-ways, observe adjacent parcels that are within ½ mile east and/or south of the property. The purpose will be to identify obvious and apparent causes for concern, such as the improper storage or use of chemicals or wastes, and the presence of tanks, stains, unusual odors, stressed vegetation, filled areas, and other indications of the potential presence of hazardous substances.

2.2.2 Records Review

Prior to the initiation of on-Site activities, Earth Tech will review available environmental records and reports of the NYSDEC, NYSDOH, Rockland County Department of Health, Division of Environmental Health and Town of Clarkstown with reference to potential TCE sources east and south of the Site. The objective of this file review is to obtain pertinent and reliable information from reports, maps, surveys, release cleanup records, and other written materials. Available information on Site history provided by Wilsonart will also be reviewed. Additional review will include the inspection of utility mapping and Property records for indications of prior uses or releases of hazardous substances adjacent to the property. Earth Tech will describe or list each identified large aboveground storage tank (AST) or underground storage tank (UST) that is on or near the property (except water tanks), and identify exterior ASTs and/or USTs on adjacent parcels that may present a significant environmental risk if a release were to occur.

2.2.3 Water Well Review

A review of public records concerning public and private water wells within ½ mile of the Site will also be conducted. Reviews will focus on the location of wells, name of owner, age and usage of the well, stratigraphic unit screened, well construction, static water levels, well yield, water quality, and any other relevant data which can be obtained. Earth Tech will also review the chemical analytical data obtained via FOIL request from the Rockland County Department of Health, NYSDOH, and NYSDEC for water supply wells in the vicinity of the property. Data may be limited as the area to be assessed is primarily within a commercial and residential area.

2.2.4 Aerial Photograph Review

Historical aerial photographs that depict the property and surrounding area will be reviewed. Particular attention will be given to potential off-Site TCE sources and the vicinity of the known groundwater impacts. The significance of each identified potential area of concern will be assessed using professional judgment, considering such factors as its nature, magnitude, and known or potential impact upon the property, and if associated with an off-Site source, the location of that source with respect to the property.

Once the water well survey and aerial photograph review have been performed a site vicinity map will be prepared. This map will summarize information gathered during the data compilation and review process. The site vicinity map will identify adjoining property usage, known private water wells, potential off-Site chlorinated solvent sources and utility easements.

2.3 TEST PITS

The leachfield is believed to be the depository for all on-Site non-process water wastes and sanitary wastes. It was believed that floor drains in the "glue room" were connected to the leachfield, which is north of the former warehouse facility (Appendix . A recent Site visit revealed that there were no floor drains in the glue room.

The actual configuration of the on-Site storm water and sanitary waste piping systems will be defined during the Site Inspection (Section 2.2.1) and Records Review (Section 2.2.2). Because the management of sanitary/non-process water wastes is not certain, the test pitting program will be flexible. For example, if the initial subsurface investigation data identifies the need to focus on another potential on-Site source area, other than the leachfield, than the test pitting program will be modified accordingly. However, at this stage it appears that the leachfield would be the most logical area to investigate the discharge of on-Site sanitary / non-process water wastes.

The test pitting program is intended to evaluate the environmental character of the soils underlying the leachfield, and to assess this area as a potential source of significant groundwater impact. The leachfield is located to the north of the former warehouse facility and west of well MW-1. Exploratory test pits will be excavated to achieve the following objectives.

- To characterize the nature and extent (lateral and vertical) of fill and its variability; and
- To collect soil samples for screening and possible laboratory analysis.

Test pits will investigate specific locations. It is anticipated that up to five test pits will be excavated (Figure 4). Proposed locations are based on the documented past land uses and Site activities, access and geographical considerations, and the data gap remaining from previous investigations. These target area locations may be slightly adjusted in the field by Earth Tech's geologist based on conditions actually encountered. The test pits will be excavated in a deliberate sequence; precautions will be taken to prevent cross-contamination. In addition, an Earth Tech representative will also conduct work zone and perimeter air monitoring during this phase of investigation (Appendix H, Chapter 9.0).

Test pits will be excavated with a backhoe with nominal 12-foot excavation depth capability. The water table is expected to be approximately 10 to 20 feet. Each test pit location will be screened with a photo ionization detector (PID) or flame ionization detector (FID) and visual observation prior to excavating. Excavated materials will be placed within a bermed area lined with poly adjacent to each test pit to prevent contact of surface soils with excavated materials. The surficial soil will be cast aside in a designated area for use as surficial backfill.

During excavation, the Earth Tech geologist will note the presence and depth of disturbed soils and groundwater seeps (if any); and document soil discoloration or staining, fill characteristics, perched water zones, sheens and non-aqueous phase liquids, and so forth. The geologist will work with the operator to sample the side wall soil at approximately 1-2 foot intervals, including the following locations:

- Ground surface, i.e. 0-2 foot depth;
- Soil or fill with the suspected highest headspace reading, if any;
- Soil or fill with the most intense or distinctive discoloration or staining, if any;
- Native soil immediately beneath the suspect leachfield; and
- Native soil just above inferred water table near the bottom of the excavation.

The geologist will promptly inspect the samples, classify the soil according to Modified Burmister, log the stratigraphy, and place the samples into clean, labeled containers. Soil headspace will be screened for organic vapors. Pertinent field observations, including headspace readings, and the presence or absence of standing water in the excavation bottom, will be documented on a test pit log.

Prior to test pit backfilling, the possible presence of venting organic vapors will be investigated in each test pit by lowering the PID or FID sensor into the completed excavation, and recording the measurement. The field geologist will verify that the results of the discrete headspace measurements and the test pit

screening appear reasonable, e.g., organic vapors detected in test pit can be explained by organic vapors detected in a discrete sample. Photographs will then be taken (with scale and identifier), and the necessary observations completed, before ordering the test pit to be backfilled.

Following completion of the test pit, all the excavated material will be returned to the excavation sequentially, i.e. top to top and, bottom to bottom. The backfill will be tamped as it is placed to ensure that all of the excavated material can be returned to the excavation. After backfilling is complete, the surficial soil will be screened visually and by PID or FID to verify that the final test pit cover soil does not appear impacted. All excavations will be surveyed for subsequent plotting on a Site base map.

At the end of each day of test pitting, the Earth Tech geologist will review the samples collected and recommend which samples should be laboratory analyzed to best achieve project objectives. It is estimated that four samples will be analyzed for VOCs (EPA SW-846 Method 8260) and Freons with ASP Category B Deliverables. Samples not analyzed will be archived.

2.4 SURFACE WATER AND SEDIMENT SAMPLING

Surface water and sediment samples will be obtained, if available, to identify potential off-Site sources that may have contributed contaminated runoff to the Site. One round of three grab samples of surface water and sediment samples will be obtained. These samples will be analyzed for VOCs (EPA SW-846 Method 8260) with Category B deliverables. All samples will be obtained during normal flow conditions or, if one or more sampling locations have no flow during such conditions, during the initial period of flow following a precipitation event. The procedure for obtaining surface water and sediment samples is presented in Appendix E.

2.5 SUBSURFACE SOIL SAMPLING AND ANALYSIS

Information obtained from previous drilling indicates that relatively compact glacial till overlies bedrock (Brunswick Formation). The historical boring log data indicates that the glacial till ranges in thickness from approximately 4 feet to 22 feet below ground surface (Appendix G). It is expected that in areas where the bedrock is close to the surface and saturated, the glacial till is likely hydraulically connected to the upper bedrock water-bearing zone.

Three soil borings/rock corings (MW-7, MW-8 and MW-9) will be advanced through the glacial till to the bedrock interface using a drill rig. The locations of the proposed boreholes are shown on Figure 4. An Earth Tech geologist or hydrogeologist will be on-Site to oversee the drilling program and select and prepare soil samples for laboratory analysis. An Earth Tech representative will also conduct work zone and perimeter air monitoring during this phase of investigation (Appendix H, Chapter 9.0).

Earth Tech will use a qualified driller that can furnish an all terrain rotary drilling rig with sufficient torque to enable the hollow stem augers to penetrate through the Site soils. Parratt-Wolff Inc., of East Syracuse, New York, will be retained for air rotary drilling.

Overburden drilling for the installation of monitoring wells will be performed using a four-inch O.D. tri-cone roller bit using an air rotary method. The soil at each borehole will be continuously sampled with a 2-inch outside diameter (O.D.) split-spoon sampler, to confirm subsurface geologic conditions. Samples will be characterized, logged and the headspace of all samples will be field screened for VOCs using a PID equipped with a 10.2 eV lamp or FID. Earth Tech will prepare soil boring logs and well installation logs for each well (Appendix E).

Once the top of bedrock is encountered, drilling will proceed using four-inch O.D. HX techniques. To confirm the presence and characteristics of bedrock, the drilling will penetrate 10 to 20 feet into the bedrock. Bedrock will be cored using a five-foot core barrel at each proposed bedrock monitoring well location. A qualified on-Site geologist will describe the lithology of rock core samples and orientation of bedrock bedding planes and fractures. Appendix E presents the form used for core logs.

Soil boring MW-7 will be advanced along the eastern property boundary south-southeast of impacted monitoring well MW-3 to evaluate soil and groundwater quality conditions upgradient of well MW-3 (Figure 4). Soil boring MW-8 will be drilled at a location that is east of existing monitoring well MW-3 to evaluate the potential for an off-site source for the groundwater impacts observed at monitoring wells MW-3 and MW-5 (Figure 4). Soil boring MW-9 will be advanced east of the drainage ditch along the southwest portion of the Site downgradient from existing bedrock well MW-3 and proposed bedrock wells MW-7 and MW-8 (Figure 4). Borings will be drilled to a depth consistent with the existing wells on-Site (approximately 35-feet). At a minimum, two soil samples will be collected from each boring. Additional soil samples may be submitted if PID or FID screening or visual examination indicate the presence of potentially impacted soil.

Subsurface samples selected for laboratory analysis will be submitted to a laboratory that is approved by the New York State Department of Health (NYSDOH) to provide Analytical Services Protocol (ASP) Category B deliverables. Selected soil samples will be analyzed for volatile organic compounds utilizing EPA SW-846 Method 8260. Sampling QA/QC procedures to be followed, including the collection of duplicate and blank samples, are presented in Appendix J.

2.6 MONITORING WELL INSTALLATION

A bedrock monitoring well will be installed at three locations on the Site (MW-7 through MW-9). The three new monitoring wells will be installed to an estimated depth of 35 feet, with well screens installed within the upper 10 to 15 feet of the saturated zone. These new bedrock wells will be installed to provide a more comprehensive depiction of groundwater flow patterns, hydraulic gradients and groundwater quality within the bedrock water-bearing zone beneath the Site.

The three monitoring wells will be constructed through the drill casing using traditional monitoring well construction procedures. The wells will be constructed of flush threaded 2-inch I.D. schedule 40 PVC well screen (0.01-inch slot) and threaded end cap attached to the base of a solid riser pipe. The wells will be installed with a sand filter pack, appropriately graded for the 10 slot screen, that will extend from at least 2 inches below the base to 1 to 2 feet above the top of the well screen. A 1/2-foot thick layer of fine choke sand will be placed above the filter sand. A 3-foot thick bentonite seal will be placed above the fine choke sand and hydrated with potable water. A thick cement-bentonite grout will be tremied from the top of the bentonite seal to approximately 3 feet below grade. The grout seal will be constructed following the SOP methods presented in Appendix E. The well will be finished with a lockable flush-mounted curb box installed over the riser pipe and set into concrete to prevent unauthorized access and provide protection for the wells. The well identification number will be clearly labeled on the outside of each curb box. A schematic of a typical bedrock monitoring well is shown in Appendix E.

2.7 WELL DEVELOPMENT

Each newly constructed bedrock groundwater monitoring well will be developed to:

- remove residual, formational silts and clays, thereby reducing turbidity during sampling that could potentially interfere with chemical analyses; and,

- Increase the hydraulic conductivity immediately around the well, which reduces the potential of the well to yield an insufficient volume of water during the sampling event.

Each monitoring well will be developed in accordance with the SOP presented in Appendix E, Monitoring Well Development Procedures. A well development log will be completed by a qualified on-Site chemist/geologist and/or hydrogeologist to document well development activities.

A goal of 50 napthalometric units (NTU) has been established for well development. Earth Tech will monitor and record the volume of water removed from each well, temperature, pH and specific conductance, as well as turbidity, until it is determined that the well is yielding representative groundwater. If 50 NTUs cannot be obtained, then well development will continue until the turbidity and other field parameters have stabilized.

2.8 WATER LEVEL MEASUREMENTS

A round of water level measurements will be collected from six existing groundwater monitoring wells and the three newly installed wells to provide information on hydraulic gradient and groundwater flow direction at the Site. The round of water level measurements will be collected prior to groundwater sampling (Section 2.9). A comprehensive groundwater contour map will subsequently be prepared to note groundwater flow patterns and hydraulic gradients within the bedrock water-bearing zone beneath the Site (Section 5.0). The SOP for collecting water level measurements is presented in Appendix E, Water Level Measurement Procedures.

2.9 GROUNDWATER SAMPLING AND ANALYSIS

Earth Tech will collect one round of groundwater samples from each of the six existing groundwater monitoring wells (MW-1 through MW-6) and the three newly installed wells (MW-7, MW-8 and MW-9). The samples will be collected no sooner than 14 days after the development of the newly installed wells. The timing of the groundwater sampling event will be coincident with the water level measurements.

Groundwater samples will be collected using new dedicated disposable polyethylene bailers. Groundwater sampling will be performed in accordance with the SOP outlined in Appendix E, Groundwater Sampling Procedures. Sampling QA/QC protocols to be followed, including the collection of duplicate and blank samples, are also presented in Appendix E.

Groundwater samples will be submitted to a NYSDOH ASP-approved laboratory for analysis of Target Compound List (TCL) total VOCs utilizing EPA SW-846 Method 8260.

2.10 HYDRAULIC CONDUCTIVITY TESTING

After development, each newly installed monitoring well will undergo in-situ hydraulic conductivity slug testing. Testing will be performed to estimate the horizontal hydraulic permeability of the upper bedrock water bearing zone (MW-1 through MW-3 and MW-5 through MW-9) and the overlying fill/glacial till (MW-4). This information will be used to estimate groundwater flow rates and assess potential source(s) of TCE. The SOP for hydraulic conductivity testing is presented in Appendix E.

2.11 DECONTAMINATION

All non-disposable equipment will be decontaminated prior to and after the field activities. All disposable sampling equipment will be discarded between samples. The purpose of equipment decontamination is to minimize the potential for compromising data validity by reducing the possibility of cross-contamination.

Detailed equipment decontamination procedures to be implemented as part of the SI activities are included in Appendix E.

The test pitting and drilling program will also include decontamination procedures to ensure that possible contaminants are not introduced to or transferred across the Site. Prior to excavating the first test pit, the equipment used in test pitting (i.e., bucket of backhoe) will be cleaned to remove possible contaminants. While working at the Site, the backhoe bucket will be decontaminated between test pit locations to prevent cross contamination. The backhoe will be decontaminated before leaving the Site at the completion of the test pitting program. The cleaning process will involve the use of a high-pressure steam cleaner. It is assumed that clean, potable water from the Congers/Clarkstown public water supply can be obtained on-Site. This water supply source will be used for all decontamination and well construction activities.

Prior to drilling the first boring, the equipment used in drilling and well installation will be cleaned to remove possible contaminants. All equipment, which will come in contact with the soil or rock, as well as water tanks, drill tools, iron casings, pumps and hoses, will undergo the initial cleaning procedure. All screen, riser pipe, top caps and bottom plugs will be decontaminated and sealed in plastic before beginning drilling at the first location. While working at the Site, the drilling equipment will be decontaminated between boring locations to prevent cross contamination. Decontamination of equipment used during the overburden drilling and bedrock drilling will take place at each drilling location. The drill rig and all drill tools will be decontaminated before leaving the Site at the completion of the well installations.

2.12 HANDLING OF INVESTIGATION DERIVED WASTES

Field activities will produce investigation-derived waste (IDW) which will require appropriate management. All drill cuttings will be field screened for VOCs prior to being spread on the ground near the respective boring. If field screening indicates possible contaminants present in the drill cuttings, appropriate measures will be taken to properly containerize (i.e., open-topped 55-gallon drums [55 1A2]) and dispose of the cuttings. The IDW requiring management includes the following:

- Groundwater;
- Decontamination fluids and sediments which may settle out of such fluids; and
- Personnel protective equipment (PPE) and associated debris resulting from the field activities.

The management of these materials is discussed below.

2.12.1 Groundwater

Groundwater generated during the drilling, development and sampling of on-Site monitoring wells will be containerized in appropriate 55-gallon drums pending receipt of analytical results. If analytical results indicate VOC concentrations below New York State groundwater standards, the groundwater will be discharged on to the ground surface at a point downgradient of the well and allowed to infiltrate. Groundwater in excess of these standards will be transported for off-Site treatment and/or disposal at a permitted facility.

2.12.2 Decontamination Fluids

Decontamination fluids associated with test pitting and drilling activities will be containerized in appropriate 55-gallon drums and temporarily stored on-Site. Upon completion of field activities, this material will be properly characterized and, after receiving the analytical results and necessary approvals

from Wilsonart and NYSDEC, will be discharged onto the ground surface at the Site or transported off-Site for treatment and/or disposal at a permitted facility.

2.12.3 PPE and Associated Debris

Used PPE and other associated debris (*e.g.*, disposable sampling equipment) will be containerized in appropriate 55 gallon drums and stored temporarily on-Site. At the conclusion of field activities, these materials will be appropriately characterized and after receiving the necessary approvals from Wilsonart and the NYSDEC, will be transported off-Site for disposal at an appropriate facility.

2.13 SURVEYING

The location and elevation of each monitoring well and monitoring point will be surveyed relative to a pre-established Site datum. The ground level elevation will be surveyed to the nearest 0.1-foot, and the measuring point (M.P.) of the PVC and top of protective casing elevations to 0.01 foot. Additionally, the wells will be located in relative position to existing ground features such as paved roads, permanent structures, bench marks and property lines.

2.14 DATA VALIDATION

Validation of the TCL analytical data will be performed in accordance with EPA Region II validation guidelines, modified as appropriate for the NYSDEC's ASP. This validation will be performed by personnel meeting the qualifications of the NYSDEC for data validations.

The data validation will include the review and evaluation of all laboratory deliverables. The basic review will cover sample request forms, chains-of-custody forms methodology summaries, laboratory chronicles and items listed below:

Volatile Organics

- Deliverable Requirements
- Case Narrative
- Holding Times
- Surrogate Recoveries and Summary
- Method Blank Summary and Data
- GC/MS Tuning and Mass Calibration
- Organic Analysis Data Sheets (Form 1)
- Quantitation Reports
- Mass Spectral Data
- EPA/National Institute of Standards (NIST) Mass Spectral Library Search for Tentatively Identified Compounds (TICs)

- Initial Calibration Data (GC/MS)
- Continuing Calibration Data (GC/MS)
- Internal Standard Areas and Retention Times

2.15 HEALTH AND SAFETY PLAN

Earth Tech has prepared a Site specific Health and Safety Plan (HASP). It is included as Appendix H. This Site-specific HASP has been prepared by Earth Tech in accordance with the regulatory requirements of 29 CFR 1910.120, "Hazardous Waste Operations and Emergency Response". Earth Tech will also adopt the Generic Community Air Monitoring Plan guidelines provided by the New York State Department of Health (Appendix I).

The purpose of the HASP is to summarize the project organization and responsibilities; establish Standard Operating Procedures (SOPs) for preventing accidents, injuries, and illnesses; identify hazards, discuss the personal protective equipment that may be used at the Site; identify personnel health and safety training requirements; summarize the monitoring techniques to be used; establish emergency procedures; describe the medical surveillance program; identify that appropriate first aid equipment is available; provide for accident reporting; and establish a schedule for safety inspections.

The HASP is primarily designed to provide a measure of protection for on-Site workers during invasive work activities, which would most likely be the only receptor to the unlikely release of airborne contaminants due to test pitting and / or drilling at the Site. Previous work performed by Earth Tech did not indicate any potential airborne hazards during drilling activities at the Site. An amendment to the HASP has been made to establish action levels for community respiratory protection. A subsection of Chapter 9 of the HASP has been prepared to protect the community (i.e., homeowners to west of railroad tracks and south of Site and commercial/light industrial tenants north and east of the Site) via continuous real-time monitoring for VOCs and particulates (i.e., dust) at the downwind perimeter during invasive activities at the Site. In addition, Earth Tech will document and establish response actions to help confirm that investigative work activities have not spread contamination off-Site through the air (Appendix H).

3.0 QUALITY ASSURANCE/QUALITY CONTROL ACTIVITIES

A Quality Assurance/Quality Control (QA/QC) program will be implemented during this investigation to insure that policies and procedures will be followed that will result in the achievement of several data quality objectives. The overall objective of the QA/QC program is to identify procedures for defensible sampling, chain-of-custody, laboratory analysis and instrument calibration. Detailed procedures are included in Appendix J.

A Data Usability Summary Report (DUSR) will be prepared by a qualified Earth Tech Quality Assurance officer capable of conducting full data validation in general conformance with NYSDEC's guidance policy (copy included in Appendix J).

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A Quality Assurance/Quality Control (QA/QC) program will be implemented during this investigation to insure that policies and procedures will be followed that will result in the achievement of several data quality objectives. The overall objective of the QA/QC program is to identify procedures for defensible sampling, chain-of-custody, laboratory analysis and instrument calibration. Detailed procedures are included in Appendix J.

A Data Usability Summary Report (DUSR) will be prepared by a qualified Earth Tech Quality Assurance officer capable of conducting full data validation in general conformance with NYSDEC's guidance policy (copy included in Appendix J).

4.0 EXPOSURE ASSESSMENT

Earth Tech will complete a qualitative human exposure assessment as part of the investigation to identify if people can be exposed to contaminants that may be present at the Site. The exposure assessment will utilize environmental conditions identified during the subsurface investigation. From this, all potential exposure pathways and scenarios will be determined.

5.0 PROJECT REPORT

Data evaluation and report preparation consists of compilation, integration and evaluation of information collected during the subsurface investigation. Data evaluation will be conducted continuously during the field investigation. The results of well drilling, water level data and laboratory tests will be integrated to develop an understanding of the Site geology, hydrogeology, groundwater flow system and mechanisms of contaminant migration at and adjacent to the Site. A final report will be prepared for submittal to the NYSDEC. The report will document all investigation activities and will discuss the rationale and methods of study for each phase of investigation. The report will include all new data, data analysis and calculations, methodology, water quality results, a surveyed map of the Site including locations and elevations of all wells, contour maps of the water table, and chain of custody documentation as well as any field notes.

The report will include at a minimum:

- a base map depicting the surveyed locations of all environmental sampling points;
- a description of all activities performed and the methods used to conduct the investigation;
- a thorough description of site geologic and hydrogeologic conditions, correlated to historical data;
- a summary of analytical results and comparison to regulatory standards;
- a Data Usability Summary Report (DUSR);
- a discussion of the nature and extent of soil and groundwater impacts, if any;
- a qualitative human exposure assessment;
- conclusions regarding the results of the investigation; and
- a request for an affirmative determination by NYSDEC that a "Covenent to Not Sue" is necessary.

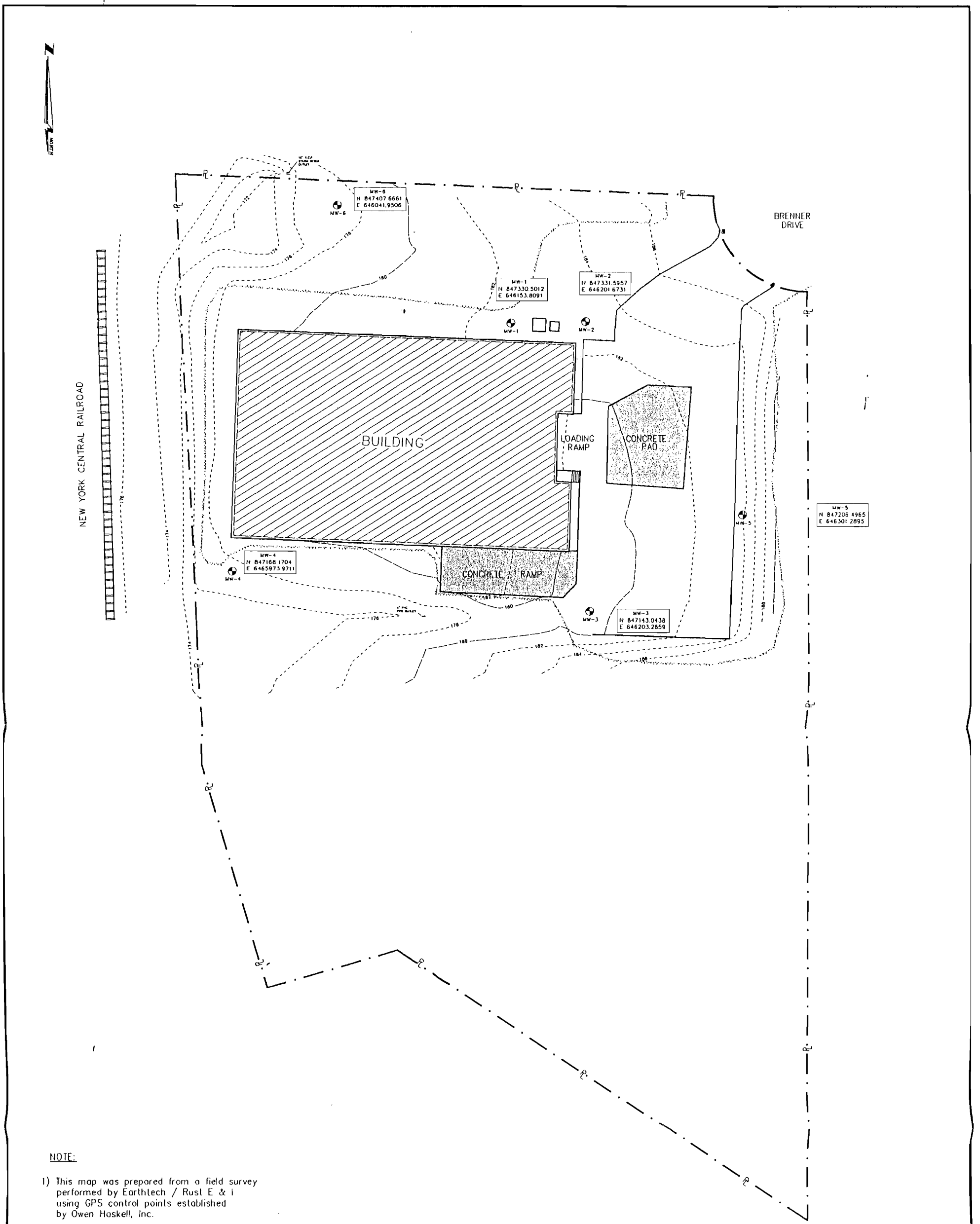
TABLES

Table 1
Summary of Chemical Inventory
Wilsonart International, Inc.
Congers, New York

Date/Reference	Hazardous Material (Type)	Quantity Stored	EPA Waste No.
January 23, 1975 (Inventory) Ralph Wilson Plastics Co.	WA-200 (LOKWELD-200 Solvent) - Toluene (10%) - MEK (40%) -Lactol or Heptane (50%) WA-500 (LOKWELD Contact Adhesive) - Acetone (30-60%) - Toluene (15-19%) - Hexane (40-70%) WA-100 (LOKWELD-100 Solvent) - Kentone (Acetone; MEK) (25-30%) - Aromatics [Toluene (15%), Xylene (5%)] (10-19%) - Aliphatics (46-53%) WA-800 (LOKWELD CONTACT ADHESIVE) - Acetone (34%) - Toluene (15-19%) - Hexane (50%) WA-801 (LOKWELD 801 Contact Adhesive) - Acetone (25%) - Methanol (6%) - Toluene (16%) - Hexane (46-53%)	18 1-quart cans 210 1-gallon cans 860 5-gallon cans 330 55-gallon drums 30 1-quart cans 210 1-gallon cans 120 5-gallon cans 55 55-gallon drums 18 1-quart cans 18 1-gallon cans 180 5-gallon pails 165 55-gallon drums 240 5-gallon pails 1,320 55-gallon drums 180 5-gallon pails 825 55-gallon drums	
June 3, 1983 (Toxic Materials Storage Registration Form) Ralph Wilson Plastics Co.	Contact Adhesive/Solvents	80 55-gallon drums 300 pails	
September 1984 (Hazardous Material Inventory Statement) Ralph Wilson Plastics Co.	Contact Adhesive Contact Solvent Liquid Cementings	78 55-gallon drums 500 5-gallon pails 6,125 1-gallon cans 3,240 1-quart cans 864 1-pint cans 18 55-gallon drums	A99 A99 A99 A99 A99 A99 NA1193
February 26, 1988 Tier 2 (Chemical Inventory and Location Form) Ralph Wilson Plastics Co.	Toluene Acetone Hexane 1,1,1-Trichloroethane	10,001-50,000 pounds Stored in 55-gallon drums Stored in 55-gallon drums Stored in 55-gallon drums Stored in 55-gallon drums	

FIGURES

L:\WORK\32969\CADD\FIGURE 1.DWG PLOT DATE: MAY 2000



EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY

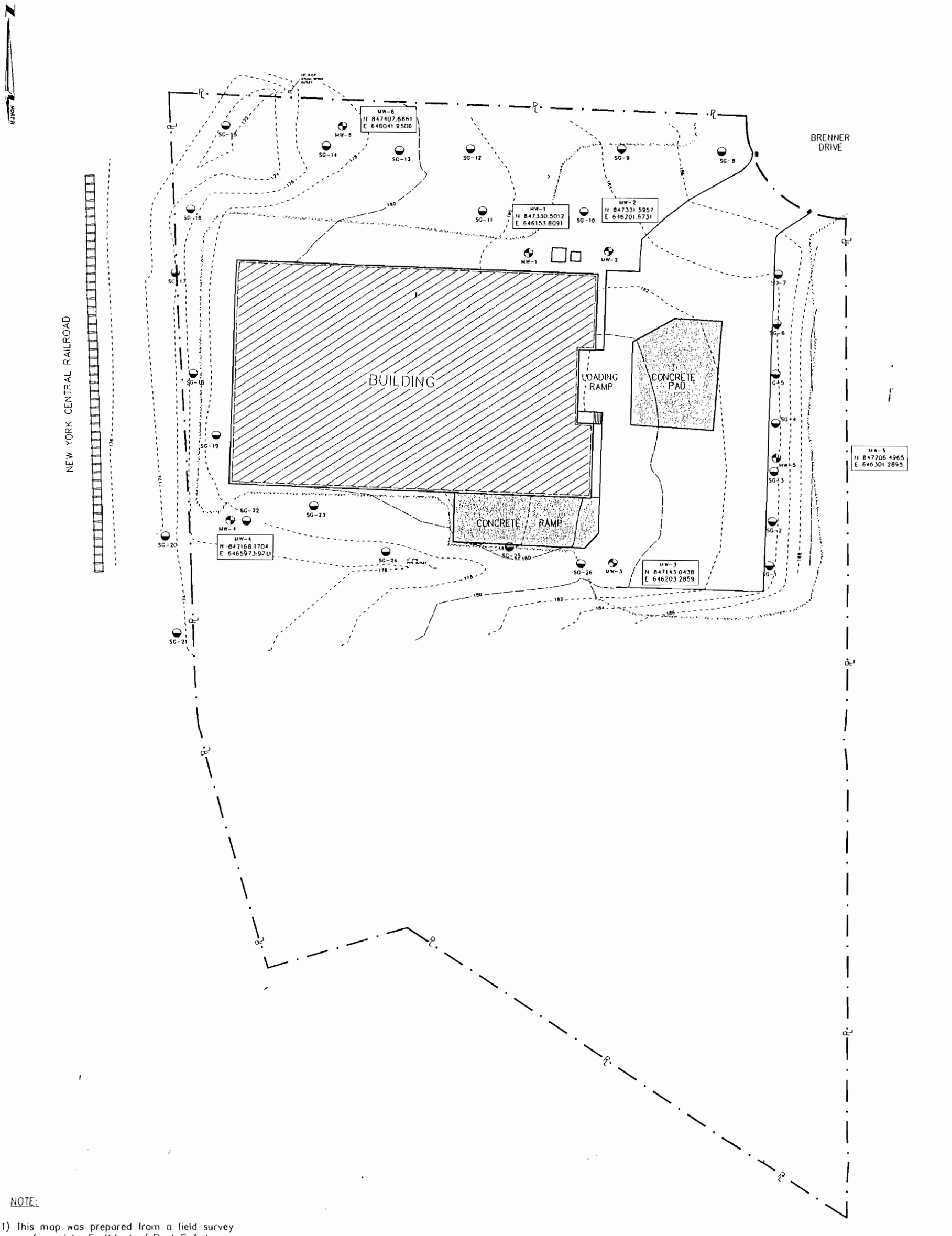
WILSONART INTERNATIONAL

CONGERS, NEW YORK

MAY, 2000 39693

FIGURE 1
SITE MAP

L:\WORK\32969\CADD\FIGUR 1.1.DWG PLOT DATE: MAY 2000



NOTE:

1) This map was prepared from a field survey performed by Earthtech / Rust E & I using GPS control points established by Owen Haskell, Inc.
2) The horizontal positions are reported in feet; NAD 1983 State Plane of New York East.
3) The elevations are reported in feet; NGVD 1929 vertical datum.
4) Existing ground surface contour interval: 2 feet.
5) Property boundary shown is approximate. Its use is intended for engineering purposes only.

LEGEND

- MW-1 — MONITORING WELL LOCATION
- SG-1 — PASSIVE SOIL LOCATION
- ℄ — APPROXIMATE PROPERTY BOUNDARY

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WILSONART INTERNATIONAL

CONGERS, NEW YORK

MAY, 2000 39693

FIGURE 2
SITE MAP
WITH 1998 MONITORING POINT LOCATIONS

L:\WROK\32969\CADD\502-F-02.DWG PLOT DATE: 11-13-98

NOTE:

1) This map was prepared from a field survey performed by Earthtech / Rust E & I using GPS control points established by Owen Haskell, Inc.
2) The horizontal positions are reported in feet; NAD 1983 State Plane of New York East.
3) The elevations are reported in feet; NGVD 1929 vertical datum.

NEW YORK CENTRAL RAILROAD

BUILDING

CONCRETE RAMP

LOADING RAMP

CONCRETE PAD

MW-1 168.63'
MW-2 168.68'
MW-3 168.38'
MW-4 167.53'
MW-5 168.86'
MW-6 167.90'

167.80'
167.90'
168.00'
168.10'
168.20'
168.30'
168.40'
168.50'
168.60'
168.70'
168.80'

SCALE IN FEET
0 20 40 80

NORTH

BRENNER DRIVE

LEGEND

MW-2 168.63' — MONITORING WELL LOCATION WITH CORRESPONDING GROUNDWATER ELEVATION

168.50' — GROUNDWATER ELEVATION CONTOUR (0.1' CONTOUR INTERVAL - DASHED WHERE INFERRED)

GROUNDWATER FLOW DIRECTION

EARTH TECH
A tyco INTERNATIONAL LTD. COMPANY

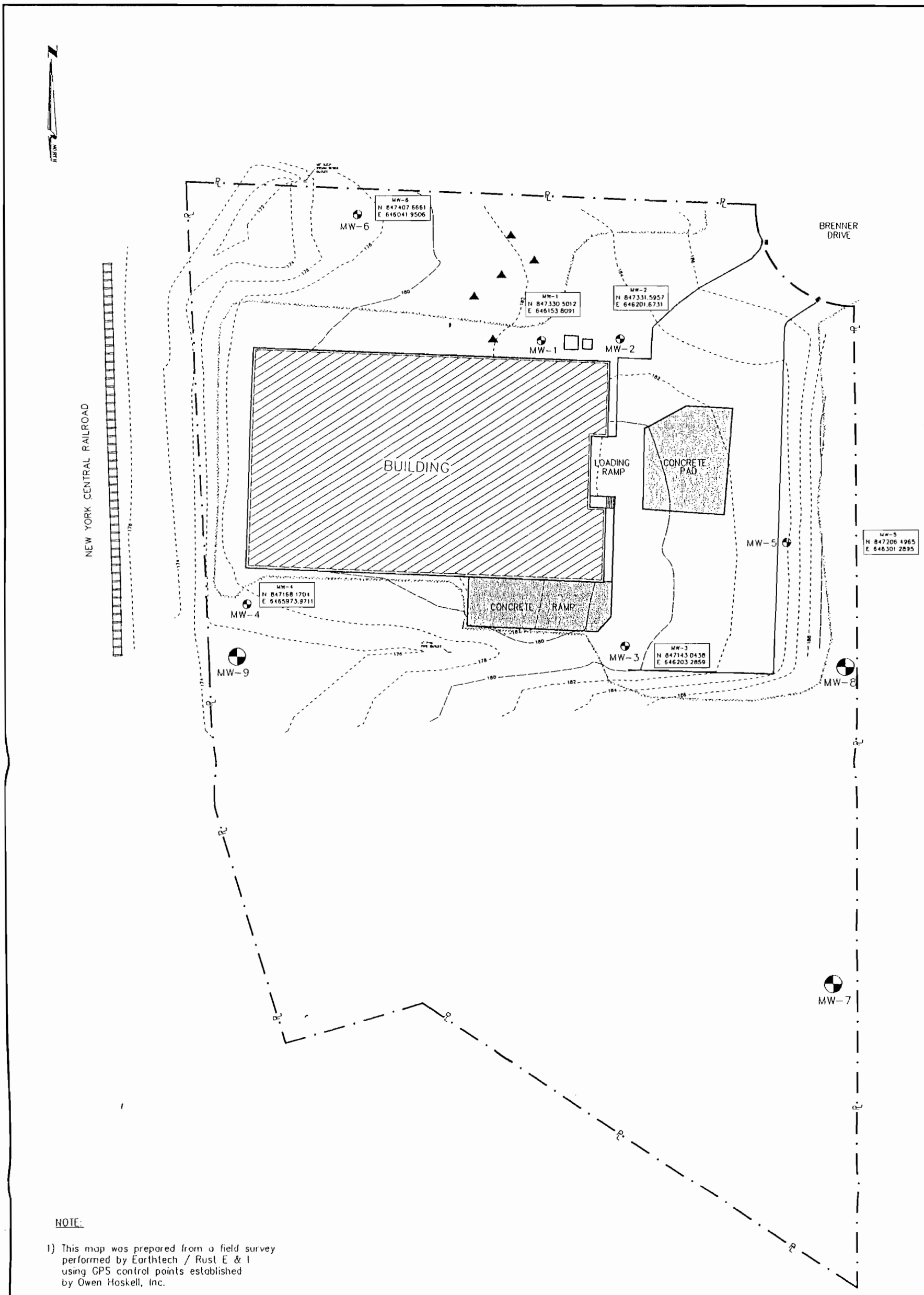
WILSONART INTERNATIONAL

CONGERS, NEW YORK

NOV. 1998 203502

FIGURE 3
GROUNDWATER CONTOUR MAP
(OCTOBER 21, 1998)

L:\WORK\32969\CADD\FIGURE 2.DWG PLOT DATE: MAY 2000



NOTE:

1) This map was prepared from a field survey performed by Earthtech / Rust E & I using GPS control points established by Owen Haskell, Inc.

2) The horizontal positions are reported in feet; NAD 1983 State Plane of New York East.

3) The elevations are reported in feet; NGVD 1929 vertical datum.

4) Existing ground surface contour interval: 2 feet.

5) Property boundary shown is approximate. Its use is intended for engineering purposes only.

LEGEND

- ▲ PROPOSED TEST PIT LOCATION
- MW-7 PROPOSED BEDROCK MONITORING WELL LOCATION
- MW-1 MONITORING WELL LOCATION
- APPROXIMATE PROPERTY BOUNDARY

EARTH TECH

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WILSONART INTERNATIONAL

CONGERS, NEW YORK

MAY, 2000 39693

FIGURE 4
SITE MAP
WITH PROPOSED MONITORING POINT LOCATIONS

APPENDIX A

UST Removal Records

WILSONART.
GRAND DECORATIVE LAMINATE

RALPH WILSON PLASTICS CO.
600 GENERAL BRUCE DRIVE
P.O. BOX 6110
TEMPLE, TX 76503-6110. (817) 778-2711
TLX II: 910-890-5880

November 6, 1987

Mr. Henry Adams
Commissioner
New York State Dept. Environmental Conservation
Division of Water
50 Wolf Road, Room 326
Albany, New York 12233

Dear Mr. Adams:

Please find enclosed a completed underground tank notification form reflecting the removal of our two tanks at this location. The tanks were removed October 14, 1987 and soil samples showed no contamination.

If there are any further questions, please call.

Sincerely,

Zoe Rascoe

Ms. Zoe Rascoe
Environmental Engineer

lo

Enclosure

OCT-25-1997 13:38 9143582540 95% P.03

TOXIC M[illegible] GASES STORAGE REGISTRATION FORM

Fac. Ref. No. [illegible] | Official Use Only | Receipt No. | Amt. of Fee

Principal Property Tax Code 14* District		*15*Section		*16* Block		*17* Lot
2*Facility Name Ralph Wilson Plastics Co. Div. of Dart & Kraft	*3* No. *4* Street 1 Brenner Drive	*5* Comm. Congers	*6* State N.Y.	*7* Zip 10920	Phone No. 914-268-4171	
32*Facility Owner same	*33*No. *34*Street "	*35*Comm. "	*36*State "	*37*Zip "	Phone No. "	
42*Facility Operator same	*43*No. *44*Street "	*45*Comm. "	*46*State "	*47*Zip "	Phone No. "	
52*Land Owner same	*53*No. *54*Street "	*55*Comm. "	*56*State "	*57*Zip "	Phone No. "	
62*Tank Owner same	*63*No. *64*Street "	*65*Comm. "	*66*State "	*67*Zip "	Phone No. "	

70*Are chemical drums or containers stored at this site? Yes X No

*71*Empty Drums ____ *72*Full or Part Full X *73*Waste Material ____ *74*New Material X *75*Average No. Being Stored 80 drums 300 pails

*76*Type of Materials: New Oil Products ____ Waste Oil ____ Organic Solvents ____ Other Contact adhesive and solvents

702			703		706	707								715	716	717		718						719		720				721			701
TANK NO.	ABOVEGROUND	UNDERGROUND	INDOORS	OUTDOORS	CAPACITY (GALLONS)	GASOLINE	NO. 2 FUEL OIL	NO. 6 FUEL OIL	KEROSENE	WASTE OIL	OTHER OIL	ORGANIC SOLVENTS	INDUSTRIAL WASTES	OTHER MATERIALS (SPECIFY)	YEAR INSTALLED AT THIS LOCATION	INSTALLED NEW YES	INSTALLED NEW NO	PLAIN STEEL	FIBERGLASS	BUFFHIDE	STIP-3	DOUBLE WALLED	OTHER	IN USE	ABANDONED	DISPENSER SUBMERSIBLE	DISPENSER SUCTION	DISPENSER GRAVITY	DISPENSER OTHER	FILL PUMPED	FILL GRAVITY	FILL OTHER	OFFICAL USE
1		X		X	12,000									Diesel Fuel	1974	X		X						X			X				X		
2		X		X	6,000									Diesel Fuel	1974	X		X						X			X				X		

I certify that information on this application and all attachments have been reviewed and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in this application, I believe that the information is true, accurate, and complete. I understand that false statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Date	Print Name	Signature	Title
6/3/83	AUSTIN T. McGRATH	Austin T. McGrath	Office Mgr.

APPENDIX B

Rockland County Department of Health Violations (February 1985)

☐ Routine Inspection
☐ Re-Inspection
☐ Complaint
☐ Spill Investigation
☐ Field Inspection

RCHD - ARTICLE XVIII
HAZARDOUS MATERIAL STORAGE
INSPECTION REPORT

☑ Permit to Operate Req.
FILE CODE 7-C-2
OTHER

Page 1 of 2

FACILITY NAME Ralph Wilson Plastics OPERATOR Ralph Wilson Plastics Co

FACILITY ADDRESS 1 Brenner Dr Congers DATE 2-1-85

TIME 10:40

Note: The items circled below are violations of Article XVIII of the Rockland County Sanitary Code and must be corrected immediately unless otherwise stated.

Item #	Description
1.	Facility for storage of hazardous material doing business without cert. to operate (X.a, X.b).
2.	Unauthorized transfer of const. or operation permit (XI).
3.	Emergency plans, floor plans, haz. material inventory statement not submitted to RCHD or maintained on premises (XXI.c, X.c, XXI.a).
4.	Storage facility installed or modified w/o permit (IX, XII.b.3, XII.d.3, XII.f.3, XIII.a.1, XIV.a.2, XIV.a.3, XVI.a.1).
5.	Storage facility constructed or modified w/o Professional approval, or not in accordance with manufacturer's recommendation. (XII.a.1, XII.a.2, XII.b.2, XIII.c, XIII.d.1, XIV.a.1, XVI.a.2, XVI.a.3).
6.	Improper discharge of hazardous material (VII, XII.b.1, XII.e, XIV.b.2, XIX.b).
7.	Tanks not taken out of service in prescribed manner (XII.b.4, XII.f.1(I), XII.f.1(II), XII f.1(III), XII.f.2, XIII.b.3).
8.	Required testing of tank systems not performed (XII.c.1, XII.c.2, XII.c.3, XII.c.4, XII.c.5, XIII.b.1, XIV.b.1).
9.	Results of tank testing not provided to RCHD (XII.c.4, XIII.b, XIV.b.1).
10.	Inventory records not kept in an approved manner (XII.d.1, XVII.b.3, XVII.b.4).
11.	Leakage of hazardous material not reported to RCHD (XII.d.2, XIII.d.2, XVII.b.3, XIX.a)
12.	Transfer operations not performed in safe manner (XV.b.1, XV.b.2, XV.b.3).
13.	Transfer facilities not properly designed (XV.a.1, XV.a.2).
14.	Portable containers or tanks not properly stored or handled (XVII.a.1, XVII.a.2, XVII.a.3, XVII.a.4, XVII.b.1, XVII.b.2).
15.	Bulk (dry) material not properly stored (XVIII.a, XVIII.b, XVIII.c, XVIII.e, XVIII.f).
16.	Road salt not properly stored (XVIII.d.)
17.	Required posting or labeling not present or satisfactory (XXI.a, XXI.b).
18.	RCHD not provided access to facility (XXII.a, XXII.b, XXII.c).
19.	Underground gasoline tanks not equipped with vapor recovery device -6 NYCRR 229 (see attached form).
20.	Waste material hauled by non-permitted hauler (RCSS Art.3, Sec 1, Sec. 2).
21.	Cross-connection endangering water system (RCSS-Art.2, Sec.3).
22.	Other

Inspected by: Michael Gallagher (Signature)

Report received by: (Signature)

Rockland County Health Department Article XVIII
Hazardous Material Storage
INSPECTION CONTINUATION SHEET

[ ] Routine Inspection
[ ] Re-Inspection
[ ] Complaint
[ ] Field Inspection
[ ] Spill Investigation

File Code: —
Other:
Page 2 of

Name of Facility	Name of Individual Receiving Report	
Ralph Wilson Plastics Co	Justin McGrath	
Address	Date of Inspection	Time of Inspection
1 Brennan	2-1-25	10.40

Storage Loc. ID	Item No.	Remarks
	(3)	a) Floor plans must be revised detailing building showing locations of doorways general warehouse area, general office area, exact storage location — storage area "B" should indicate non flammable storage area
		b) X.C Hazardous material inventory must be revised. Chemical name of products (to example contact solvent ~~to~~ containing 1,1,1 Trichloroethane, etc etc) Location of area B and chemical stored
		Maximum quantity stored @ given time
		Weed killer must be listed, propane
	(17)	~~W~~ Warning placard to all entrances of storage areas required
		Submitted, and other modification listed
	—	

Above must be completed by Feb 20, 25

Inspection By: (Signature)	Report Received By: (Signature)	Date
Michael Mahoney		2-1-25

DATE OF NEXT INSPECTION: After Feb 20 25

Rockland County Health Department Article XVIII
Hazardous Material Storage
INSPECTION CONTINUATION SHEET

[/] Routine Inspection
[ ] Re-Inspection
[ ] Complaint
[ ] Field Inspection
[ ] Spill Investigation

File Code: [illegible]
Other:
Page 3 of 3

Name of Facility	Name of Individual Receiving Report	
Welch Wilson Plastic Co	Austin McGrath	
Address	Date of Inspection	Time of Inspection
1 Brewer Dr	2-1-85	10:40

Corners

Storage Loc. ID	Item No.	Remarks
	(14)	Chemicals stored on cement surface cracked areas must be properly sealed
		Area where wall meets floor must be sealed
		Above work must be completed by May 1-1985
		OTHER - Basic Inventory records very good; broken down to +or- gallon

Inspection By: (Signature) Mahoney

Report Received By: (Signature) [illegible]

Date 2-1-85

DATE OF NEXT INSPECTION: [illegible] 2-15-85

Rockland County Health Department Article XVIII
Hazardous Material Storage
INSPECTION CONTINUATION SHEET

[/] Routine Inspection
[ ] Re-Inspection
[ ] Complaint
[ ] Field Inspection
[ ] Spill Investigation

File Code: I
Other:
Page 3 of 3

Name of Facility	Name of Individual Receiving Report	
Welch Wilson Plastic Co	Austin McGrath	
Address	Date of Inspection	Time of Inspection
1 Brenner Dr	2-1-85	10:40

Consers

Storage Loc. ID	Item No.	Remarks
	(14)	Chemicals stored on cement surface cracked areas must be properly sealed
		Area where wall meets floor must be sealed
		Above work must be completed by May 1-1985
		OTHER - Basic Inventory records very good; broken down to + or - gallon

Inspection By: (Signature) Mahoney
Report Received By: (Signature) X
Date 2-1-85

DATE OF NEXT INSPECTION: 2-15-85

APPENDIX C

HTI – Chemical Inventory
(February 1997 to August 1999)

HUDSON™
TECHNOLOGIES, INC.
THE REFRIGERANT LEADER

275 North Middletown Road
Pearl River, NY 10965
Phone: (914) 735-6000 • Toll Free: (800) 853-2244
Fax: (914) 368-2540
http://www.hudsontech.com

July 25, 2000

Mr. Paul Maxwell
Wilsonart International, Inc.
2400 Wilson Place
PO Box 6110
Temple, Texas 76503-6110

Re: 100 Brenner Drive

Dear Mr. Maxwell:

I am in receipt of your letter of July 21, 2000.

Please be advised that at various times and in varying quantities, the following chemical substances were used and/or stored on the above premises during Hudson's occupancy thereof:

- Dichlorodifluoromethane (R-12);
- Tetrafluoroethane (R-134a);
- Chlorodifluoromethane/2 methyl propane/1 chloro-1,1-difluoroethane mixture (R-406a);
- Chlorodifluoromethane (R-22);
- Chlorodifluoromethane & Chloropentafluoroethane mixture (R-502);
- 2,2 dichloro-1,1,1-trifluoroethane (R-123);
- Welding gases consisting of Acetylene, Argon, Oxygen and Carbon Dioxide;
- Liquid Nitrogen;
- Small containers of various and miscellaneous cleaning solutions.

Yours very truly,

Stephen P. Mandracchia
Executive Vice President

SPM/
Via FAX (254) 207-2384 and regular mail

APPENDIX D

Summary of Groundwater Quality

Comparison of Water Quality Data vs.
New York State Department of Environmental Conservation
Guidance Values for Drinking Water

Hudson Technologies Inc
100 Brenner Drive

Job # N1556
Congers, NY

Petroleum Compound	Guidance Value	MW-1 8/12/98	MW-2 8/12/98	MW-3 8/12/98
Benzene	0.7	BDL	BDL	BDL
Toluene	5	BDL	BDL	BDL
Ethylbenzene	5	BDL	BDL	BDL
Total Xylenes	15	BDL	BDL	BDL
Acetone	50	BDL	BDL	BDL
Chlorobenzene	5	BDL	BDL	BDL
Chloroform	5	BDL	3.3	BDL
1,1-Dichloroethane	5	[illegible] 5.7	BDL	BDL
1,1-Dichloroethene	5	[illegible] 5.4	[illegible] 9.8	[illegible] 14
1,2-Dichlorobenzene	5	BDL	BDL	BDL
Dichlorodifluoromethane	5	BDL	BDL	BDL
N-Butylbenzene	5	BDL	BDL	BDL
n-Propylbenzene	5	1.9	BDL	BDL
Sec Butylbenzene	5	4.6	BDL	BDL
Isopropylbenzene	5	1.6	BDL	BDL
4-Isopropyltoluene	5	BDL	BDL	BDL
Napthalene	10	1.4	1.2	BDL
1,2,4 Trimethylbenzene	5	3.4	BDL	BDL
1,3,5 Trimethylbenzene	5	BDL	BDL	BDL
Trichlorofluoromethane	5	BDL	2.6	6.0
Trichloroethene	5	[illegible] 10	[illegible] 320	[illegible] 490
1,1,1 Trichloroethane	5	2.2	[illegible] 38	[illegible] 66
Tetrachloroethene	5	BDL	1.7	3.0
MTBE	50	1.8	3.6	2.0

Notes:

1. All measurements recorded in micrograms-per-liter (ug/L).
2. Samples analyzed in accordance with EPA method 8260 plus MTBE.
3. BDL = Below Detection Limits (detection limits varied).
4. The present guidance values were adopted by NYSDEC in September of 1990.
5. Analytical measurements exceeding guidance values are in bold type.

Comparison of Water Quality Data vs.
New York State Department of Environmental Conservation
Guidance Values for Drinking Water

Hudson Technologies Inc
100 Brenner Drive

Job # N1556
Congers, NY

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Chlorobenzene	5	BDL	BDL	BDL
Chloroform	5	BDL	3.3	BDL
1,1-Dichloroethane	5	[redacted] 5.7	BDL	BDL
1,1-Dichloroethene	5	[redacted] 6.4	[redacted] 9.8	[redacted] 14
1,2-Dichlorobenzene	5	BDL	BDL	BDL
Dichlorodifluoromethane	5	BDL	BDL	BDL
N-Butylbenzene	5	BDL	BDL	BDL
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Napthalene	10	1.4	1.2	BDL
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Notes:

1. All measurements recorded in micrograms-per-liter (ug/L).
2. Samples analyzed in accordance with EPA method 8260 plus MTBE.
3. BDL = Below Detection Limits (detection limits varied).
4. The present guidance values were adopted by NYSDEC in September of 1990.
5. Analytical measurements exceeding guidance values are in bold type.

Summary of Ground Water Data
Wilsonart - Congers, New York
October 21, 1998

Compound	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-6 Field Dup.
1,1-dichloroethene	6	<5	<5	<5	<5	<5	<5
1,1-dichloroethane	6	<5	<5	<5	<5	7	7
1,1,1-trichloroethane	<5	12	63	<5	20	<5	<5
trichloroethene	<5	95	494	<5	160	9	8

Note: All results expressed in ug/l = parts per billion (ppb).

APPENDIX E

Standard Operating Procedures

SURFACE WATER SAMPLING PROCEDURES

Summary

Surface waters, if encountered, may be sampled by direct submersion of the sample container. The order of surface water samples should be collected in a downstream to upstream direction. If however, the sample location does not lend itself to easy access, then an extendable pond sampler may be used to collect samples by attaching the sample container or pre-cleaned sampling beaker made of appropriate material (glass, stainless steel or Teflon) to the pond sampler. Volatile samples should be collected by submerging the VOA vial and capping underwater if possible, otherwise care must be taken when using a separate container for collection so as not to agitate the water during collection or transfer into the VOA vials.

Procedure

1. Assemble the pond sampler. Make sure that the sampling beaker and the bolts and nuts that secure the clamp to the pole are tightened properly.

2. With proper protective garment and gear, take grab samples by slowly submerging the pre-cleaned beaker with minimal surface disturbance.

3. Retrieve the pond sampler from the surface water with minimal disturbance.

4. Remove the cap from the sample bottle and slightly tilt the mouth of the bottle below the dipper/device edge.

5. Empty the sampler slowly, allowing the sample stream to flow gently down the side of the bottle with minimal entry turbulence. VOA vials will be filled first, in order to obtain the least disturbed sample. VOA vials will be filled completely with no head-space and/or bubbles.

6. Continue delivery of the sample until the bottle is almost completely filled.

7. All recovered samples will be preserved (if required), labelled, and placed on ice. Complete the Chain-of-Custody documents and record in the field log book.

8. Decontaminate the sampling beaker or attach another pre-cleaned beaker prior to sampling at the next location.

SEDIMENT SAMPLING PROCEDURES

Summary

A simple way in which to collect a sediment sample is with a disposable plastic and/or stainless steel scoop, trowel, coring device or otherwise required for the Project. This method is most appropriate for shallow sediment samples to a depth of 0-6 inches. Disposable plastic and/or pre-cleaned stainless steel is preferred over the more common chrome-plated, which should be avoided if chromium is of concern. The procedure detailed below is for visibly stained soil, but applies to non-stained soil as well.

Procedure

1. Samples will be collected using disposable plastic or dedicated stainless steel trowels, spatulas, coring devices (i.e., auger or sediment tube) or otherwise required for the Project. Any non-dedicated equipment will be decontaminated between samples and/or sample locations. The order of sediment samples should be collected in a downstream to upstream direction.

2. Prior to sample collection, the area in question will be inspected to determine the extent of staining by inserting the blade of a shovel or pick axe to the maximum depth possible, and if conditions permit, removing and inspecting a vertical cross section.

3. If staining is limited to the top few inches, the sample will be defined by collecting the top few inches of stained material over a horizontal area large enough to provide a sufficient quantity of soil for subsequent laboratory analysis. The surface area and depth of the collected sample will be recorded.

4. Screen each sample with a photoionization detection (PID) meter and collect the VOA sample at a discrete interval.

5. If the stained area is six inches or more in depth, the top inch or two of material will be removed and a sufficient quantity of subsurface material, from a depth of 2 inches down, will be collected for analysis. The areal and depth dimensions of the collected sample will be recorded, as well as the depth of any visible, remaining stained soil. Repeat the process until the required depth has been attained.

6. Samples (by either above procedure) will be collected, in such a manner, to ensure that the sample (stained soil) is not diluted by the incorporation of unstained soil. In the event that this is not possible, the proportions of each soil type (i.e., stained vs. non-stained) will be recorded.

7. Approximately 24 ounces of material will be collected at each location.

   Grab Sampling: All VOC samples will be collected as discrete grab samples without compositing or mixing in the field.

   Compositing: See Method of Cone and Quarter.

8. Secure a Teflon lined cap onto the container(s), and carefully/clearly label the sample container(s).

9. Place the sample container(s) on ice in a cooler for transport to the laboratory. Complete all chain-of-custody documents and record in the field log book.

10. All sample locations will be delineated with a wooden stake with the sample location identification clearly labeled on the stake.

11. All recovered sample material, excluding that reserved for laboratory analyses, will be handled as per other investigation-derived waste.

12. Decontaminate equipment after use and between sample locations.

Method of Cone and Quarter

Scope and Purpose

This procedure describes the requirements for compositing individual, non-aqueous grab samples to form one composite sample using the method of cone and quarter. Cone and quarter can also be used to ensure that a grab sample, not destined for VOC analysis, has been adequately homogenized.

NOTE: Samples destined for VOC analysis should be collected as discrete grab samples without compositing or mixing in the field.

Equipment

- Stainless steel mixing bowl/Plastic sheeting
- Stainless steel hand trowel(s)/shovel(s)
- Disposable plastic and/or pre-cleaned stainless steel scoop/trowel/coring device/etc.
- Buckets/Containers
- Gloves
- Sample Containers

Procedure

Equal volumes/quantities of individual grab samples which will comprise the composite are placed on a clean plastic sheet or stainless steel mixing bowl. The final amount of composite sample to be collected is dependent on the laboratory analyses to be performed.

The grab samples are thoroughly mixed together into a single pile (i.e., cone) using a shovel, hand trowel or gloved hand by continually mixing the material and shaping it into a cone. Material at the cone base is then repeatedly placed at the top of the cone while maintaining the cone shape. Large non-analyzable materials (stones, twigs, debris, etc.) which fall to the base of the cone by gravity are removed from the sample. The process is continued until the grab samples have been completely incorporated into one sample and non-analyzable materials removed.

10. All sample locations will be delineated with a wooden stake with the sample location identification clearly labeled on the stake.

11. All recovered sample material, excluding that reserved for laboratory analyses, will be handled as per other investigation-derived waste.

12. Decontaminate equipment after use and between sample locations.

Method of Cone and Quarter

Scope and Purpose

This procedure describes the requirements for compositing individual, non-aqueous grab samples to form one composite sample using the method of cone and quarter. Cone and quarter can also be used to ensure that a grab sample, not destined for VOC analysis, has been adequately homogenized.

NOTE: Samples destined for VOC analysis should be collected as discrete grab samples without compositing or mixing in the field.

Equipment

- Stainless steel mixing bowl/Plastic sheeting
- Stainless steel hand trowel(s)/shovel(s)
- Disposable plastic and/or pre-cleaned stainless steel scoop/trowel/coring device/etc.
- Buckets/Containers
- Gloves
- Sample Containers

Procedure

Equal volumes/quantities of individual grab samples which will comprise the composite are placed on a clean plastic sheet or stainless steel mixing bowl. The final amount of composite sample to be collected is dependent on the laboratory analyses to be performed.

The grab samples are thoroughly mixed together into a single pile (i.e., cone) using a shovel, hand trowel or gloved hand by continually mixing the material and shaping it into a cone. Material at the cone base is then repeatedly placed at the top of the cone while maintaining the cone shape. Large non-analyzable materials (stones, twigs, debris, etc.) which fall to the base of the cone by gravity are removed from the sample. The process is continued until the grab samples have been completely incorporated into one sample and non-analyzable materials removed.

Following "coning", the sample is divided into four approximately equal smaller piles. The "coning" mixing process is then briefly repeated in each of these four new piles. Equal aliquots from each of these new smaller piles are collected and mixed to form the preliminary composite sample. Coning is again repeated briefly and aliquots of this final composite are transferred to the respective sample containers.

Responsibilities

It shall be the field team leader's responsibility to ensure that all composite samples specified in the site work plan are adequately prepared by following the procedures presented in this SAP.

SPLIT-SPOON SAMPLING PROCEDURES

Summary

A standard method of soil sampling per ASTM Designation D-1586 "Standard Method for Penetration Test and Split Barrel Sampling of Soils" will be utilized to obtain representative samples for characterization, laboratory testing and as a measure of the resistance of soil to sampler penetration.

Procedure

1. Ensure that all down-hole drilling tools (i.e., split-spoon, drilling rods, augers) have been properly decontaminated prior to advancement of borehole.

2. Measure the sampling equipment lengths and openings to ensure that they conform to specifications. Confirm the weight of the hammer (140 lbs.) by verbal confirmation or visual means.

3. Lower the sampler to the desired depth at the bottom of the auger column and check the depth against length of the rods and the sampler.

4. Attach the drive head sub and hammer to the drill rods without the weight resting on the rods.

5. Lower the weight and allow the sampler to settle up to 6 inches. If it settles more, consider use of another sampler.

6. Mark three 6-inch intervals on the drill rods relative to a drive reference point on the rig. With the sampler resting on the bottom of the hole, drive the sampler with the 140 lb. hammer falling freely over its 30 inch fall until 18 inches have been penetrated or 100 blows applied.

7. Record the number of blows per 6 inches. Determine the "N" value by adding the blows for the last 12 inches.

8. Upon retrieval the split-spoon should be opened, its contents logged, and then immediately transferred into a sample bottle using a decontaminated spatula or spoon. If the sample is to be chemically analyzed in the laboratory it should be placed in the proper container. A separate sub-sample should be placed into a clean glass jar and its lid sealed with aluminum foil for subsequent screening with a photoionization detection meter.

9. Document all properties and sample depths and locations on the boring log form.

10. All recovered samples (excluding those reserved for chemical analysis) should be labelled and stored until the project has been completed, at which time the samples will be disposed of accordingly.

11. All recovered samples requiring chemical analysis should be homogenized, if possible, by the method of cone and quarter and will be labelled, carefully and clearly, addressing all the categories or parameters and placed on ice. Complete all chain-of-custody documents and record in the field log book.

12. Decontaminate all sampling equipment after use and between sample locations.

BOREHOLE PLUGGING/ABANDONMENT PROCEDURES

Summary

Boreholes that will not be further utilized will be backfilled and sealed (plugged) prior to abandonment to prevent downhole contamination. Sealing can be achieved by backfilling the borehole with bentonite or with a cement/bentonite grout. The grout is usually introduced from bottom to top using either a tremie pipe or the drill rods.

Procedures

1. Identify the equipment to be used for the preparation, mixing and pumping the grout. Ensure the volume of the tub or drum to be used for mixing has been measured adequately. Ensure that the pump to be used has adequate pressure to enable complete return to surface.

2. Identify the source of the water to be used for the grout, and determine its suitability for use. In particular, water with high sulphate, or chloride levels or heated water should not be used. These types of waters can cause operational difficulties or modify the set up for the grout.

3. Calculate and document the volume of grout needed to seal the borehole by multiplying borehole diameter area (based on auger head diameter plus 10%) by the borehole depth.

4. The grout is mixed to a smooth consistency. Cement/bentonite grout slurry will generally be mixed to the following composition:

Portland Type II Cement:	(94-lbs.)
Quick Gel (or equivalent) Bentonite Powder:	(3 to 5 lbs.)
Water:	(7 to 8 Gallons)

5. If grouting is performed by tremie methods, the tremie line or pipe is inserted to within 2 feet of the bottom of the borehole.

6. Attach the grout pump discharge line to the tremie line an begin pumping grout. Grout is pumped until it returns to the surface inside the drill casing. The auger or drill casing is incrementally removed and the grout inside the casing is topped-off until all the drill casing is extracted from the borehole. Restore the surface near the borehole and level the ground to the pre-existing grade.

7. Record all grouting activities, including the type and amount of materials used, equipment used and grouted intervals in the field notebook.

NOTE:
On occasion, there may be some settling of the grout that takes place over several days. If this settling occurs, use the natural soils from the immediate vicinity to achieve the level at grade.

MONITORING WELL DEVELOPMENT PROCEDURES

Summary

Monitoring wells/piezometers are generally developed following installation to improve the hydraulic properties of the sand pack and to remove any sediment within the well and adjacent to the screen/sand pack. Well development should continue until the water is relatively sediment free (<50 NTU).

Procedure

1. Select an appropriate well development method depending on water level depth, well productivity, and sediment content of the water. Well development options include:

   - bailing;
   - surging;
   - inertial pumping;
   - powered suction-lift pumping; and
   - air-lift development;

2. Decontaminate all equipment prior to use and between wells.

3. Assemble and install the equipment in the monitoring well. Take appropriate precautions to prevent the introduction of contaminants on the equipment during installation. Assemble and operate pumps in accordance with manufacturer's instructions.

4. Repeatedly remove water from the well until the discharged water is relatively sediment free.

5. Monitor the effectiveness of development at regular intervals (after each well volume is removed) using a portable turbidity meter. For each volume of groundwater removed, record sample turbidity, pH, temperature and conductivity, and any other project-specific field parameters.

6. Discontinue well development when the turbidity of the discharged water reaches a predetermined value (e.g., 50 NTU) or when the turbidity level, pH, temperature, and conductivity stabilize indicating that formation water is being removed and that additional purging will most likely not reduce the turbidity level in the water column.

7. Handle development waters as appropriate for the site. Options include containerizing for later off-site disposal; containerizing for disposal elsewhere on-site; or disposing of water onto the ground near the well. The final disposal will be determined by the client or the regulatory agency providing oversight. If the last option is chosen, discharge the water directly downgradient from the well in such a way it does not directly run off the site (e.g., not into a ditch, sewer or stream).

WATER LEVEL MEASUREMENT PROCEDURES

Summary

Water levels in monitoring wells and piezometers are measured using an electronic water level detector or hand held tape.

Procedure

1. Decontaminate the water level probe and the portion of cable that enters the water column, or the tape, following standard decontamination procedures.

3. Test the water level meter to ensure that the batteries are charged.

4. Place plastic sheeting on the ground around the well casing to ensure that the measuring equipment doesn't contact the ground.

5. Remove the protective casing cover and monitoring well cap and place them on the plastic.

6. Lower the probe slowly into the monitoring well until the audible or visual alarm indicates water.

8. With the measuring graduations on the water level meter cable, measure water level depth to the nearest 100th of a foot from the pre-designated and surveyed measuring point (MP) on the top of the well casing. If an MP is not available, take measurement from the highest point on the monitoring well casing.

10. Repeat the measurement for confirmation, record the depth to water in the field notebook, and note the reference point from which the measurement was taken.

12. Remove the probe from the monitoring well slowly, drying the cable and probe with a clean paper towel.

13. Replace the monitoring well cap and lock the protective casing cap in place.

GROUNDWATER SAMPLING PROCEDURES

Summary

Collection of groundwater samples must be performed with precision and care to ensure that samples are representative of actual groundwater conditions and to yield reliable laboratory analytical results.

Procedure

1. Spread plastic sheeting on the ground around the well.

2. Unlock and carefully remove the well cover to avoid having any foreign material enter the well.

3. Monitor the interior of the riser pipe with a photoionization detector for the presence of volatile organic compounds (VOCs).

4. Sound the well to determine the depth. Using an electronic water level detector, measure the water level from below the top of casing. Determine the volume of water in the well based on the water column and diameter of the well. Decontaminate the end of the probe between wells by washing with liquinox and water, and rinsing with deionized water.

5. Purge the well using either a dedicated, pre-cleaned, bottom-filling, check-valved bailer and new dedicated 1/8 inch nylon line or with an inertial lift or powered suction lift technique equipped with dedicated sample tubing.

6. Purge the well of approximately 3 to 5 well volumes (measured in a 5 gallon bucket), starting with removal of the water from the top of the well if using a bailer.

7. If the well purges to dryness and recharges rapidly (within 15 minutes), continue to remove water as it recharges until the required volumes are attained. If the well purges to dryness and is slow to recharge, terminate purging.

8. For each volume of groundwater removed during purging, record sample turbidity, pH, temperature and conductivity, and any other project-specific field parameters.

9. Place a small quantity of purge water in a clear clean glass jar and allow it to sit for a few minutes. Examine the water in the jar for a visible miscible layer or sheen, and note any unusal odors, and/or color. If it is suspected that a sheen or other non-aqueous film was present on the surface of the water column prior to initiating purging, then decontaminate the dedicated bailer, notify the project manager of the condition, and confirm the sampling technique to be used.

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Summary

Collection of groundwater samples must be performed with precision and care to ensure that samples are representative of actual groundwater conditions and to yield reliable laboratory analytical results.

Procedure

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HYDRAULIC CONDUCTIVITY TESTING PROCEDURES

Summary

Hydraulic conductivity (K) tests (slug or bail tests) are performed on monitoring wells to determine the in-situ hydraulic conductivity of the hydrostratigraphic unit screened. Slug and bail tests involve inducing a near instantaneous change in the water level in the well, and measuring the rate of recovery of the water level toward the pre-test equilibrium level. The appropriateness of the specific type of test (slug or bail) and methods for analyzing the resultant data (Hvorslev, Bouwer-Rice, Cooper-Bredeheft-Papadoplos, Nyugen-Pindar) are specific to the final construction parameters of each monitoring well and the composition of geologic materials encountered. After installation and determination of the variables, Earth Tech will decide which methods are most approriate to use for each well.

During the slug test, either a 5-foot aluminum rod or a known volume of deionized water will be quickly introduced into the well casing to cause the water level to rise in the well. During the bail tests, the same 5-foot aluminum rod or a dedicated precleaned PVC bailer will be rapidly removed from the well to lower the water. Procedures and equipment requirements are expected to vary depending on the rapidness of the water level response.

Procedure - For use with In-Situ, Inc. Hermit Model SE 1000C Data Logger and Pressure Transducer

- Record appropriate initial data in field notebook, including date of test, well identification, well construction details (i.e., screen length, screen diameter, riser diameter and screen depth), type of test and field personnel.

- Clean pressure transducer and cable, and the slug and line, following standard decontamination procedures before initiating tests at each well.

- Measure and record the depth to water relative to a pre-established measuring point (usually the top of the well casing). Only monitoring wells which have fully recovered to static level conditions are to be tested. Depth to water should be recorded as a depth below the measuring point (bmp).

- Connect the pressure transducer to the data logger and lower the transducer into the well four to ten feet below the water surface. If using a solid slug or a bailer to introduce the slug or to bail, then the transducer should be set ten feet below the water level in the well. If using a distilled water slug, the transducer should be set four to five feet below the water level. *Note: It is important that the pressure transducer not be subjected to pressures greater than the pressure transducer rating.*

- Secure the position of the transducer by clamping the transducer cable to the well casing using a rubber covered clamp. If the edges of the well casing are sharp, cover them with cloth or plastic to protect the transducer cable.

10. After well purging is completed and the well has sufficiently recharged, collect samples using the same dedicated sampling device as used for purging (i.e., bailer or lift pump). Fill sample containers with a minimum of sample agitation. Do not use the lift pump to fill the sample containers. Draw a full colume of water up to the pump intake then crimp the tubing tightly to form a vacuum and disconnect the tubing from the pump. Remove the tubing from the well while carefully coilling the tube to avoide contact with potential sources of conatimants. Fill the sample jars from the bottom of the tube by releasing the crimp and allowing the sample to drain slowly into the glassware.

11. Perform groundwater sampling within three hours of purging. In the case of wells that recharge slowly, sample as soon as adequate recharge has occurred. If a well does not contain or yield sufficient volume for all required laboratory analytical testing (including quality control), prioritize sample analyses.

12. Collect samples in the general order of the volatilization sensitivity of the parameters. The preferred collection order for common groundwater parameters is as follows:

- Volatile organic compounds;
- Semi-volatile organic compounds;
- Field parameters; and,
- Total metals.

13. In cases where total metals are a contaminant of concern, and the monitoring well produces samples with a high sediment load, it may be appropriate to collect the total metals sample first. This will avoid entrainment of sediments in the sample, which could influence the analytical data. Therefore, the metal samples will be collected prior to the volatile organic samples.

14. Clearly label all samples with a waterproof marker (pen for VOCs), and follow Earth Tech's Sample Labeling, Handling and Shipping Procedures.

- Set up the data logger. Check the battery and enter coefficients for the transducer to be used (scale, offset, linearity, coefficient, delay, and number of transducer).

- Enter test data (select test number, check clock, set reference level (stable water level).

- To initiate test, depress START key and press ENTER. View the data being recorded as the test is going on by depressing the DATA key. If data indicates that well recovery is reasonable, allow the test to run until well recovery returns to baseline and then stop the test. If well recovery does not appear to be reasonable, attempt to determine the cause and conduct another test if necessary.

- If another test is to be performed, replace the bailer or solid object and let the well re-equilibrate or allow the well to re-equilibrate prior to introducing the next slug. Change settings as necessary and repeat the test.

Procedure - Manual Collection of Test Data

Hydraulic conductivity test data can be collected manually with the use of a water level measuring device. This method is less desirable than using a data logger because initial test data is usually missed and it is difficult to collect closely spaced measurements in a formation which recovers rapidly. However, manual data collection may be the preferred method for very slowly recovering formations, where hour measurement intervals are appropriate. The following methods shall be used when performing manual collection of K-test data:

- Establish a schedule according to which water level measurement will be measured. Measurement intervals should be close during the initial potion of the test and increase over time. Create a table in the field notebook to record times and water level measurements.

- Prepare water level meter or steel tape and chalk so that you will be ready to take a measurement immediately after the slug or bail is initiated.

- Perform the slug or bail as described above.

- Collect water level measurements according to the schedule in your field notebook. Continue taking measurements until the water level has recovered to at least 80% of the pre-test level.

FIELD EQUIPMENT CALIBRATION PROCEDURES

Calibration

Field equipment that may be used during collection of environmental samples at the Site includes a pH meter, conductivity meter, turbidimeter, thermometer, dissolved oxygen meter and a photoionization detector (HNU PI-101 or equivalent). Calibration and standardization of the pH, specific conductivity, turbidity and dissolved oxygen meters is summarized below:

- The pH meter is calibrated in accordance with EPA Method 150.1. It is fully re-calibrated (three points) at least two times daily, and it is checked with pH 7 buffer every ten samples, two hours, or every time it has been turned off for more than two hours and then turned on again, whichever occurs first.

- The specific conductance meter is calibrated in accordance with EPA Method 120.1. It is calibrated at the beginning and in the middle of the work day.

- The turbidimeter is calibrated in accordance with EPA Method 180.1. It is calibrated at least twice daily following the manufacturer's operating instructions over a linear, non-drifting range of interest.

- The dissolved oxygen meter is calibrated following the manufacturer's instructions at least daily, and whenever the instrument has been turned off.

- Temperature is measured with a thermometer, or with a platinum electrode that has been factory calibrated and coupled to the pH meter.

The PID used for soil screening and health and safety surveys is calibrated following the manufacturer's instructions, at the beginning of the day, whenever the instrument is shut-off for more than two hours and at the field representative's discretion.

Field Testing QC

Field QC check control limits (pH, specific conductance and turbidity) are detailed below. In addition, field determinations of pH, specific conductance, and turbidity, are obtained in duplicate for every 20 aqueous samples collected.

- pH: If the pH QC sample (pH 10.0 buffer after initial calibration with pH 4.0 and 7.0 buffers) exceeds $\pm$ 0.5 pH units from the true value, the source of the error is determined and the instrument re-calibrated. If a continuing calibration check with pH 7.0 buffer is off by $\pm$ 0.5 pH unit, the instrument is re-calibrated.

- Specific conductance: QC samples must be within +10% of the true values. The specific conductance QC sample is a 0.01 M or 0.1 M potassium chloride solution.

- Turbidity: QC samples must be within + 10% of the true values. The turbidity QC sample is a commercially prepared polymer standard (Advanced Polymer System Inc. or equivalent).

- Temperature: Temperature measurements are performed with a factory calibrated thermometer or thermocouple.

- Specific conductance: QC samples must be within +10% of the true values. The specific conductance QC sample is a 0.01 M or 0.1 M potassium chloride solution.

- Turbidity: QC samples must be within + 10% of the true values. The turbidity QC sample is a commercially prepared polymer standard (Advanced Polymer System Inc. or equivalent).

- Temperature: Temperature measurements are performed with a factory calibrated thermometer or thermocouple.

SAMPLE LABELING, HANDLING AND SHIPPING PROCEDURES

Sample Identification/Labeling

All samples will be assigned a unique identification code which identifies the sample type, and location. Additional identification codes are applied as needed. Examples of the codes used for each sample type are identified below.

Environmental Samples

A. Examples of Soil Boring Samples:

SB-7 (soil boring location) 20' (depth of top of 2' sample)
Sample ID = SB7-20

B. Examples of Soil Samples from Monitoring Wells:

MW-7 (monitoring well soil boring location) 10' (depth of top of 2' sample)
Sample ID = MW7-10

C. Examples of Groundwater Samples:

MW-8 (groundwater monitoring well location)
Sample ID = MW-8

Quality Assurance/Quality Control Samples

Matrix Spike/Matrix Spike Duplicate Samples - QA/QC samples will include a matrix spike (MS) and matrix spike duplicate (MSD) sample at a frequency of not less than 5% (one MS/MSD pair per every 20 samples collected) for each matrix (aqueous and soil). They will receive the following code:

Example: MW-1SMS or MW-1SMSD
SB-7MS or SB-7MSD

Field Duplicate Samples - Field duplicate samples are sent blind to the laboratory. The sample location where the blind field duplicate was collected is marked both in the field notebook and on the copy of the chain-of-custody record retained by the sampling team. A blind field duplicate sample will be collected at a frequency of one per every 20 samples for each matrix (aqueous and soil). They will be given the following code

Example: FD-1

Equipment Blanks - Equipment blanks are not required when dedicated sampling equipment is used.

If non-dedicated sampling equipment is used during the investigation, field blanks will be analyzed at a frequency of not less than 5% (one field blank per every 20 samples collected). In either case, they receive the following code:

Example: EB-*mm/dd-#* (where *mm/dd* represents the date the field blank was collected and # represents the order collected, if more than one equipment blank is collected on any given day.)

Trip Blanks - Trip blanks are used to monitor potential sample volatile organic contamination during shipment to and from the laboratory. It also provides information on laboratory water quality since the laboratory provides the trip blank water. One trip blank will submitted for analysis for each day volatile organic samples are collected. A trip blank will be included in each cooler that contains volatile organic samples, therefore all volatile organic samples and containers will be shipped to and from the laboratory in a minimum number of coolers to minimize the number of trip blanks required.

Example: TB -*mm/dd* (where *mm/dd* represents the date the trip blank was collected)

All sample containers will be labeled prior to sample collection. A non-removable label on which the following information is recorded with a permanent water-proof marker (pen for VOCs) will be affixed to each sample container for shipment to the laboratory:

- project name/location;
- sample identification code;
- date and time the sample was collected (except for field duplicates); and,
- analysis requested.

Containers, Preservation, and Holding Times

All sample containers used will be of traceable quality purchased and supplied by the laboratory. All samples will be collected and preserved, and all analytical holding times, will conform to the NYSDEC Analytical Services Protocols (October, 1995).

Chain-of-Custody Protocol and Shipping Requirements

A chain-of-custody record will be initiated by Earth Tech upon sample collection and by the laboratory providing the sample containers. The laboratory record traces the path of the initial sample bottles and preservation at the laboratory to the field for sample collection. The Earth Tech chain of custody is initiated at the point of sample collection and documents their return to the laboratory for analysis.

The Earth Tech Project Manager or designated representative will notify the laboratory of the anticipated schedule of upcoming field sampling activities. This notification will include information concerning the number and type of samples, as well as the anticipated date(s) of shipment of samples to the laboratory.

The laboratory will be responsible for supplying insulated containers (typically coolers) for storing and shipping the samples. Each sample shipping cooler has a unique identification number marked on the outside and inside, and is sealed with two adhesive tags assigned with unique identification numbers assigned by the laboratory. The seal number may be recorded on the chain-of-custody form. Separate numbered seal tags are provided for return shipment.

All sample bottles within each shipping container are individually labeled with an adhesive identification tag provided by the laboratory. In the event that laboratory tags are not available, Earth Tech sample identification tags are used.

Field samplers receiving the sample containers check each cooler for the integrity of the seals. Coolers with both seals broken are returned to the laboratory with the containers unused. Field samplers break the seals and inspect the contents for breakage.

Once the sample containers are filled, they are immediately placed in the cooler with sealed bags of ice ("wet ice") or synthetic ice packs ("blue ice") to maintain the samples at 4°C (±2°C). The field sampler indicates the Client Name, Project Number, Site Location, Sampler, Earth Tech Contact, Laboratory Contact, Lab Identification, Date Report Required, Sample Identification, Date, Time, Sample Matrix, Collection Vessel, Lowering Device, Number of Sample Containers, Preservative and an indication of whether the sample is a Composite or Grab sample in the spaces provided on the appropriate chain-of-custody form for each sample. The Comment column of the chain of custody form is used to record specific considerations associated with sample acquisition, such as the analyses to be performed.

The identification numbers of each cooler shipped are written on the chain-of-custody form and the respective shipping manifest (if applicable). The chain-of-custody forms are signed and placed in a sealed plastic Ziploc™ bag in the cooler. The completed shipping containers are closed, and two paper seals are affixed to the latch and lid. The seals must be broken to open the cooler and if the seals are broken before receipt at the laboratory the possibility of tampering is plainly indicated.

The cooler is shipped to the laboratory via an overnight courier or hand delivered under appropriate chain-of-custody procedures. Whenever possible, the samples will be shipped within 24 hours of collection. Samples will not be shipped later than 48 hours following collection. When the laboratory receives the coolers, it will check the custody seals prior to opening the cooler and sign the chain of custody form following inspection of the cooler's contents, thus accepting custody of the samples.

L:\WORK\32496\DOCS\WORKPLAN\SMPLQC.SOP

EQUIPMENT CLEANING AND DECONTAMINATION PROCEDURES

Heavy Equipment Decontamination

Items such as drill rigs, well casings, auger flights, and backhoes present potential sources of contamination of environmental samples. Therefore, all equipment and material associated with sampling events must be decontaminated prior to use and prior to the equipment leaving the site. Equipment will first be steam-cleaned with potable water, and rinsed thoroughly with potable water.

Cleaning of Field Sampling Equipment

All non-dedicated hand sampling equipment (including trowels, spatulas and spoons, and also split-spoons) used to collect samples for chemical analyses will be decontaminated using the following procedures:

- Non-phosphate detergent wash;
- Tap water rinse; and
- Distilled/deionized water rinse.

If equipment is to be stored for future use, allow it to air dry, and then wrap it in aluminum foil (shiny-side out) or seal in plastic bags.

Cleaning of Pumps and Pumping Equipment

In general, all suction-lift pumps and pumping equipment that have come in contact with the water column during well purging will be equipped with dedicated and pre-cleaned tubing. If submersible pumps are used, then use the following cleaning procedure:

- Wash the exteriors of the pump, wiring, and cables with non-phosphate detergent;
- Rinse with potable water;
- Pump a minimum of 25 gallons of potable water through the pump housing and through the pump tubing if a dedicated pre-cleaned discharge hose is not used for each well; and,
- Perform a final rinse by pumping 5 gallons of distilled/deionized water through the pump tubing if a dedicated pre-cleaned discharge hose is not used for each well.

APPENDIX F

Leachfield Location Map

(1)

Rockland County Health Dept.
Salmon Hill Bldg
West Haverstraw, N.Y.
6th Mr. & Wm Hook
Rear Mr. Rear Mark

12/11/64

Below is sketch of location of septic system installed at Union Beach, Corps 2 & 3. The septic system installed under my supervision is in accordance with approved plans.

Very truly yours,
Samuel Weber
C.S. # 31272

78'-6"

36'

60'
9'
9'
9'
9'
60'

50'-6"

93'-6"

1 Sty Br. & Block Bldg

25'

S.T.

S.T.

D.B.

39'

31'-6"

BRENNER DRIVE

APPENDIX G

Historical Boring Log Data

Environmental Products & Services, Inc.

Subsurface Log

Hole No.: MW-1
Sheet 1

Date Started: 8/5/98
Date Finished: 8/5/98

Client: Hudson Tech Inc.
100 Brenner Dr
Location: Congers, NY

Method of Investigation: 4" Air Hammer

Branch: Newburgh
Project No.: N1556
P. Manager: Robert Hulihan

Drilling Co.: EP&S
Geologist: Robert Hulihan

Driller: Jeff Ludlow
D.Helper Chet Brunelle
Drill Rig: CT-150

Weather: Sunny 85° F

Depth (ft.)	Sample No.	Sample Depth (ft.)	Blows per 6"	"N"	Recovery (ft.)	Sample Description	Field Analytical Reading	Well Details	Groundwater and Other Observations
						Light red brown silt, little gravel, light, dry			
5									
						Large boulder (Gneiss)			
10									
						Dark red brown silt, gravel, light, dry			
15									
						Large boulder (Gneiss)			
20									
25									Groundwater at 25'
30									
						Bottom of Well 30.0'			
35									

Sample Types:
S=Split Spoon
R= Rock Core
T= Shelby Tube:
O =

N - ASTM D1586

Backfill Well Key
Cement
Native Fill
Sand
Bentonite

Environmental Products & Services, Inc.

Subsurface Log

Hole No.: MW-2
Sheet 1

Date Started: 8/5/98
Date Finished: 8/5/98

Client: Hudson Tech Inc.
100 Brenner Dr
Location: Congers, NY

Method of investigation: 4" Air Hammer

Branch: Newburgh
Project No: N1556
Manager: Robert Hullihan

Drilling Co.: EP&S
Geologist: Robert Hullihan

Driller: Jeff Ludlow
D.Helper: Chet Brunelle
Drill Rig: CT-150

Weather: Hot 90° F

Depth (ft.)	Sample No.	Sample Depth (ft.)	Blows per 6"	"N"	Recovery (ft.)	Sample Description	Field Analytical Reading	Well Details	Groundwater and Other Observations
5						Dark red silt, gravel, tight, dry			
10						Clusters of large boulders (Gneiss)			
15						Dark red silt, gravel, tight, dry			
20									
25						Clusters of large boulders (Gneiss)			
30									Groundwater at 25'
						Bottom of Well 30.0'			
35									

Sample Types:
S=Split Spoon
R= Rock Core
T= Shelby Tube
O =

* = ASTM D1586

Backfill Well Key
Cement
Native Fill
Sand
Bentonite

Environmental Products & Services, Inc.

Subsurface Log

Hole No.: MW-3
Sheet 1

Date Started: 8/5/98
Date Finished: 8/5/98

Client: Hudson Tech Inc.
100 Brenner Dr.
Location: Congers, NY

Method of investigation: 4" Air Hammer

Branch: Newburgh
Project No.: N1556
Manager: Robert Hullihan

Drilling Co.: EP&S
Geologist: Robert Hullihan

Driller: Jeff Ludlow
D.Helper: Chet Brunelle
Drill Rig: CT-150

Weather: Hot 90° F

Depth (ft.)	Sample No.	Sample Depth (ft.)	Blows per 6"	"N"	Recovery (ft.)	Sample Description	Field Analytical Reading	Well Details	Groundwater and Other Observations
						Dark red silt, little gravel, tight, dry			
5						more gravel w/depth			
10						Clusters of large boulders (Gneiss)			
15						Dark red silt, little gravel, tight, dry			
20						Alternating layers of cobbles & boulders (Gneiss)			
25									Groundwater at 25'
						Dark red silt, little gravel, tight, wet			
30						Bottom of Well 30.0'			
35									

Sample Types:
S=Split Spoon
R= Rock Core
T= Shelby Tube:
O =

Backfill Well Key
Cement
Native Fill
Sand
Bentonite

RUST E&I Albany, NY (518) 458-1313	**Test Boring Log**				Boring No. MW-4
PROJECT: Brenner Drive CONGERS, N.Y.					Sheet 1 of
CLIENT: WILSONART INTERNATIONAL, INC.					Job No. 20350Z.10100
DRILLING CONTRACTOR: PARRATT-WOLFF, INC.					Meas. Pt. Elev. 179.35'
PURPOSE: LIMITED SUBSURFACE INVESTIGATION					Ground Elev. 177.6'
DRILLING METHOD: [redacted] HOLLOW STEM AUGER		SAMPLE	CORE	CASING	Datum: amsl
DRILL RIG TYPE: IR A-300	TYPE	SS	--	HSA	Date Started: 10-15-98
GROUNDWATER DEPTH: 11.04'	DIAM.	2" O.D.	--	4¼" I.D.	Date Finished: 10.16.98
MEAS. PT.: PVC	WEIGHT	140#			Driller: Glen Lansing
DATE OF MEAS.: 10.16.98	FALL	30"			Inspector: Mark Williams

Depth (Feet)	Sample Number	Blow Count	Unified Classification	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS
0	S-1 ★	3			Br Cy$ s, mF(+)S, tfG; med. dense; moist to dry	Rec. = 1.8' Moist to Dry HNu H.S. = 8.2 ppm / 12.1 ppm
1		5				
		10				
2		8				
	S-2	3			Br - RdshBr $&C s(-), FS, 1mF(+)G; occ. gneiss rk frag; med. dense; moist to dry.	Rec. = 0.9' Moist to Dry HNu H.S. = 5.8 ppm
3		6				
		10				
4		8				
	S-3	7			RdshBr Cy$ s(-), FS, 1mF(+)G; occ. small rk pieces; med. dense; moist	Rec. = 1.2' Moist HNu H.S. = 5.8 ppm
5		6				
		5				
6		6				
	S-4	4			RdshBr Cy$ s(-), FS, 1(+)mfG; occ. dk Grsh SS rk frag.; wnite Qtzite FK frags; cbl @ end of spoon	Rec. = 0.5' Moist to Dry HNu H.S. = 3.2 ppm
7		4				
		5				
8		6				
	S-5	5			Br - LtGrysh Br $&C s(+), mF(+)S, 1(+)mfG; sbrded to sbang.; firm to med. dense; moist	Rec. = 0.9' Moist HNu H.S. = 3.1 ppm / 7.2 ppm
9		4				
		5				
10		3			(GLACIAL TILL)	

RUST E&I Albany, NY (518) 458-1313	**Test Boring Log**	Boring No. MW-4
PROJECT: HUDSON TECHNOLOGIES, INC. Bremner Drive		Sheet 2 of
CLIENT: WILSONART INTERNATIONAL, INC.		Job No. 20352.1010

Depth (Feet)	Sample Number	Blow Counts	Unified Classification	Visual Log Description	Geologic Description	Remarks
	S-6	5 9 10 14			Br-Rdsh Br Cy $s(+), mfS, l(+) mfG; wet @ 11.03' [cmf(+)S, s(+) Cy $, l mfG - firm]; med. dense; moist to wet	Rec.= 1.3' MOIST TO WET HNu H.S.= 3.3ppm
12	S-7	8 14 18 14			Same.	Rec.= 1.45' WET HNu H.S.= 2.2ppm
14	S-8	3 3 6 10			Rdsh Br-Br Cy $s, fS, l mfG occ. rk. frag; firm to med. dense; wet.	Rec. = 0.1' WET HNu H.S.= 0.2ppm
16	S-9	11 9 8 8			Br Cy $a, mf(+)S, l(+) mfG, sbrdad to subang.; med. dense; wet	Rec.= 1.55' WET HNu H.S.= 0.3ppm
18	S-10	3 6 9 8			Br Cy $a(+), cmf(+)S, s(+) mfG; occ. to freq. rk. frags; med. dense; wet.	Rec.= 1.15' WET HNu H.S.= 0.2ppm
20		9 12 13 50/0.3			Br Cy $a, mf(+)S, s mfG; freq. rk frag; med. dense to v. dense; wet. (GLACIAL TILL) 21.7'	Rec.= 1.8' WET HNu H.S.= 0ppm
22					BEDROCK [UPPER TRIASSIC BRUNSWICK FORMATION]	★ SOIL SAMPLE SUBMITTED FOR LABORATORY ANALYSIS [EPA METHOD 8260 plus dichlorodifluoromethane]

RUST E&I Albany, NY (518) 458-1313	**Test Boring Log**	Boring No. MW-4
PROJECT: HUDSON TECHNOLOGIES, INC. Brenner Drive		Sheet 2 of
CLIENT: WILSONART INTERNATIONAL, INC.		Job No. 203502.1010

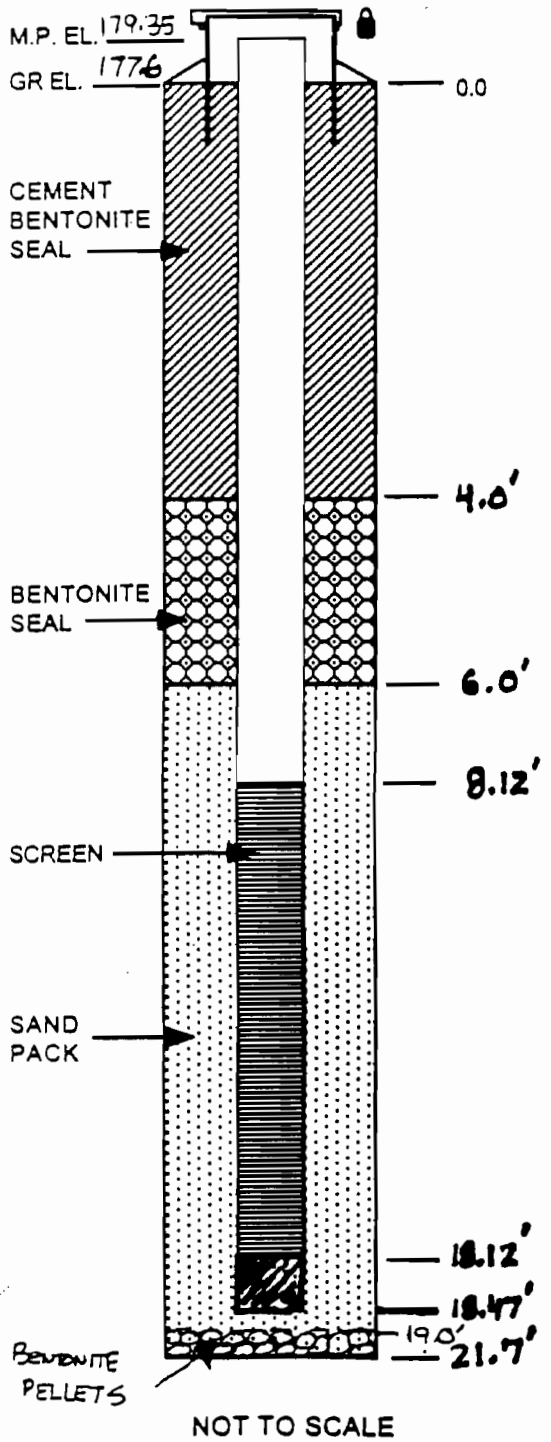
Depth (Feet)	Sample Number	Blow Counts	Unified Classification	Visual Log Description	Geologic Description	Remarks
	S-6	5			Br-Rdsh Br Cy $ s(+), mfS, l(+) mfG; wet @ 11.03' [cmf(+)S, s(+)Cy$, l mfG - firm]; med. dense; moist to wet	Rec. = 1.3' Moist to WET HNu H.S. = 3.3ppm
		9				
		10				
12		14				
	S-7	8			Same.	Rec. = 1.45' WET HNu H.S. = 2.2ppm
		14				
		18				
14		14				
	S-8	3			Rdsh Br-Br Cy $s, fS, l mfG; occ. rk. frag; firm to med. dense; wet.	Rec. = 0.1' WET HNu H.S. = 0.2ppm
		3				
		6				
16		10				
	S-9	11			Br Cy $a, mf(+)S, l(+) mfG, sbrded to subang.; med. dense; wet	Rec. = 1.55' WET HNu H.S. = 0.3ppm
		9				
		8				
18		8				
	S-10	3			Br Cy $a(+), cmf(+)S, s(+) mfG; occ. to freq. rk. frags; med. dense; wet.	Rec. = 1.15' WET HNu H.S. = 0.2ppm
		6				
		9				
20		8				
		9			Br Cy $a, mf(+)S, s mfG; freq. rk frag; med. dense to v. dense; wet.	Rec. = 1.8' WET HNu H.S. = 0ppm
		12				
		13				
		50/0.3			(GLACIAL TILL) 21.7'	★ SOIL SAMPLE SUBMITTED FOR LABORATORY ANALYSIS [EPA METHOD 8260 plus dichlorodifluoromethane]
22					BEDROCK [UPPER TRIASSIC BRUNSWICK FORMATION]	

MONITORING WELL COMPLETION LOG WELL NO. MW-4

Rust Environment & Infrastructure
12 Metro Park Road
Albany, NY 12205
(518) 458-1313

Project HUDSON TECHNOLOGIES, INC. BREITER
Client WILSONART INTERNATIONAL, INC.
Location CONGERS, N.Y.
Project No. 203502.10100
Date Drilled 10.16.98
Date Developed 10.16.98

WELL CONSTRUCTION DETAIL



NOT TO SCALE

INSPECTION NOTES

Inspector M.A. WILLIAMS
Drilling Contractor PARRATT-WOLFF, INC.

Type of Well GROUNDWATER MONITORING
Static Water Level 11.04' Date 10.16.98
Measuring Point (M.P.) TOP OF PVC
Total Depth of Well 18.47' BGS

Drilling Method
Type Hollow Stem Auger Diameter 4¼" I.D.
Casing STEEL

Sampling Method
Type SPLIT-SPOON Diameter 2" O.D.
Weight 140# Fall 30"
Interval CONTINUOS (0-21.7')

Riser Pipe Left in Place
Material Schedule 40 PVC Diameter 2" I.D.
Length 9.89' Joint Type Flush, Threaded

Screen
Material Schedule 40 PVC Diameter 2" I.D.
Slot Size 0.010" Length 10'
Stratigraphic Unit Screened OVERBURDEN (GLACIAL TILL)

Filter Pack
Sand X Gravel _____ Natural _____
Grade 0 Unimin
Amount 220 # Interval 6.0 - 19.0'

Seal(s)
Type BENTONITE (28#) Interval 4.0 - 6.0'
Type CEMENT-BENTONITE Interval 3.0 - 4.0'
Type CONCRETE Interval 0 - 3.0'

Locking Casing ☒ Yes ☐ No
Notes:

RUST ENVIRONMENT & INFRASTRUCTURE

WELL DEVELOPMENT LOG

PROJECT INFORMATION

Project Name: Wilsonart International, Inc.
Project No.: 203502.10100
Date: 10.16.98
Personnel: M.A. Williams

WELL INFORMATION

Well I.D.: MW-4
Screen diameter (inches): 2" I.D.
Screen length (feet) 10'
Riser diameter (inches) 2" I.D.
Depth to Water (ft) : 11.04' (BMP)
Well Depth (initial): 18.47 (BGS)
Well Volume: (gals) 1.5 gallons

DEVELOPMENT INFORMATION

Time Start: 16:45 Time Finish: 18:15
Method: Hand Bailer
Volume Removed (gals.): 18
Well Depth (final): 18.47' BGS
Sand/Silt Accumulation: NA

GW QUALITY PARAMETERS

Gallons	Time	DTW	Color	Odor	pH	Conductivity	Turbidity	Temp (C)	Observations
1.5	1645		Brown	none	7.36	275	>999	15.2	
4.5	1700		Brown	none	7.11	305	>999	15.1	
9	1712		Brown	none	6.97	345	>999	14.9	
12	1734		Brown	none	6.93	347	>999	14.8	
15	1746		Brown	none	6.95	350	>999	14.8	
18	1815		Brown	none	6.95	345	>999	14.8	

Notes:

RUST E&I Albany, NY (518) 458-1313	Test Boring Log					Boring No. MW-5
PROJECT: Brenner Drive CONGERS, N.Y.						Sheet 1 of 3
CLIENT: WILSONART INTERNATIONAL, INC.						Job No. 20350Z.10100
DRILLING CONTRACTOR: PARRATT-WOLFF, INC.						Meas. Pt. Elev. 183.74'
PURPOSE: LIMITED SUBSURFACE INVESTIGATION						Ground Elev. 183.96'
DRILLING METHOD: AIR ROTARY (HOLLOW STEM AUGER)		SAMPLE	CORE	CASING		Datum: amsl
DRILL RIG TYPE: IR A-300	TYPE	SS	--	HSA	AIR	Date Started: 10.14.98
GROUNDWATER DEPTH: 14.70'	DIAM.	2" O.D.	--	4¼" I.D.	4"	Date Finished: 10.14.98
MEAS. PT.: PVC	WEIGHT	140#				Driller: Glen Lansing
DATE OF MEAS.: 10.16.98	FALL	30"				Inspector: Mark Williams

Depth (Feet)	Sample Number	Blow Count	Unified Classification	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS
0	S-1	3			Br-RdshBr Cy$ l, FS; occ. organics to 0.65'-0.65'+; RdshBr-BrshRd Cy$ s(-), FS, l(+)mFG; freq. $ stone/SS rk frag; firm to med. dense; moist	Rec.=1.1' Moist HNu H.S.=0.6ppm
1		4				
		5				
2		11				
	S-2*	38			2.2-2.65'; Br mF(+)S, l$ (occ. Cy$); occ. cemented $ stone/SS rk. pieces/frags; no odr/no stning	Rec.=0.97' Moist HNu H.S.=1.1 ppm
3		37				
		50/0				
4	S-3	50/0.2'			RdshBr Cy$ t(-), FS; v. dense (GLACIAL TILL) 4.2' RdshBr $ t, f S; occ. Rdsh Br $ stone rk frag;	Rec.=0.2' DRY HNu H.S.=1 ppm
5						--SWITCH TO AIR ROTARY DRILLING TECHNIQUES
6						
7						
8						
9						
10					[BEDROCK]	

RUST E&I Albany, NY (518) 458-1313	**Test Boring Log**	Boring No. MW-5
PROJECT: HUDSON TECHNOLOGIES, INC. Brenner Drive		Sheet 2 of 3
CLIENT: WILSONART INTERNATIONAL, INC.		Job No. 203502.10100

Depth (Feet)	Sample Number	Blow Counts	Unified Classification	Visual Log Description	Geologic Description	Remarks
10	S-4	100/0			Rdsh Br - DK Rd Br $ stone & fine SS rk frags noted; dry.	Rec. = 0' Dry HNU H.S. = 0 ppm
13	S-5	50/0			Rdsh Br $ stone chps observed; weak.	Rec. = 0' Dry = HNU H.S. = 0 ppm
15	S-5A				Rdsh Br $ stone/fine SS rk chps observed.	Rec. = 0.1' MOIST TO WET HNU H.S. = 0 ppm
20	S-6				Same; weak; occ. wet @ 24.5' BGS.	HNU H.S. = 0 ppm
25					(BEDROCK)	

RUST E&I Albany, NY (518) 458-1313	**Test Boring Log**	Boring No. MW-5
PROJECT: HUDSON TECHNOLOGIES, INC. Brenner Drive		Sheet 3 of 3
CLIENT: WILSONART INTERNATIONAL, INC.		Job No. 20352.10100

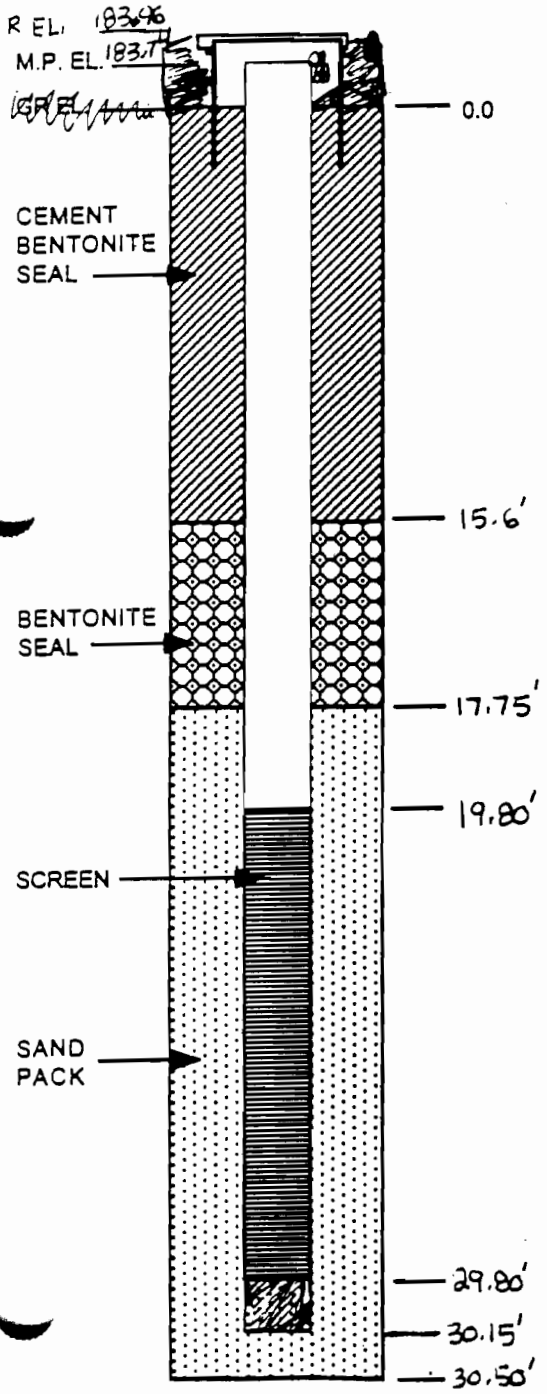
Depth (Feet)	Sample Number	Blow Counts	Unified Classification	Visual Log Description	Geologic Description	Remarks
25'	S-7	100/0			Rdsh Br f stone & fine SS rk chps noted in return.	
	S-8	100/0			Same, (BEDROCK) 30.5'	
					TOTAL DEPTH OF BORING	* SOIL SUBMITTED FOR LABORATORY ANALYSIS [EPA METHOD 8260 plus dichlorodifluoromethane

MONITORING WELL COMPLETION LOG WELL NO. MW-5

Rust Environment & Infrastructure
12 Metro Park Road
Albany, NY 12205
(518) 458-1313

Project HUDSON TECHNOLOGIES, INC. BREWER DRIVE
Client WILSONART INTERNATIONAL, INC.
Location CONGERS, N.Y.
Project No. 203502.10100
Date Drilled 10.14.98
Date Developed 10.16.98

WELL CONSTRUCTION DETAIL



NOT TO SCALE

INSPECTION NOTES

Inspector M.A. WILLIAMS
Drilling Contractor PARRATT-WOLFF, INC.

Type of Well GROUNDWATER MONITORING
Static Water Level 14.70 ' Date 10.16.98
Measuring Point (M.P.) TOP OF PVC
Total Depth of Well 30.14' BGS

Drilling Method
Type Hollow Stem Auger / AIR ROTARY Diameter 4¼" I.D. / 4" I.D.
Casing STEEL

Sampling Method
Type SPLIT-SPOON Diameter 2" O.D.
Weight 140# Fall 30"
Interval 0-2', 2-4', 4-4.2', 10', 13', 15', 21.5' & 26.5'

Riser Pipe Left in Place
Material Schedule 40 PVC Diameter 2" I.D.
Length 19.38' Joint Type Flush, Threaded

Screen
Material Schedule 40 PVC Diameter 2" I.D.
Slot Size 0.010" Length 10'
Stratigraphic Unit Screened UPPER BEDROCK (Upper Triassic Brunswick Siltstone)

Filter Pack
Sand X Gravel _____ Natural _____
Grade 0 Unimin
Amount 125 # Interval 17.75'-30.50'

Seal(s)
Type BENTONITE 25# Interval 15.6-17.75'
Type CEMENT-BENTONITE Interval 3.0-15.6'
Type CONCRETE Interval 0-3.0'

Locking Casing ☒ Yes ☐ No

Notes:

RUST ENVIRONMENT & INFRASTRUCTURE

WELL DEVELOPMENT LOG

PROJECT INFORMATION

Project Name: WILSONART INTERNATIONAL, INC.
Project No.: 203502.10100
Date: 10.16.98
Personnel: M.A. WILLIAMS

WELL INFORMATION

Well I.D.: MW-5
Screen diameter (inches): 2" I.D.
Screen length (feet) 10'
Riser diameter (inches) 2" I.D.
Depth to Water (ft) : 14.70' (BMP)
Well Depth (initial): 30.14' (BGS)
Well Volume: (gals) 2.5 gallons

DEVELOPMENT INFORMATION

Time Start: 14:00 Time Finish: 15:03
Method: HAND BAILER
Volume Removed (gals.): 20 gallons
Well Depth (final): 30.15' BGS
Sand/Silt Accumulation: 0.01'

GW QUALITY PARAMETERS

Gallons	Time	DTW	Color	Odor	pH	Conductivity	Turbidity	Temp (C)	Observations
5	1415		Brownish RED	none	7.02	277	>999	15.6	
10	1437		Brownish RED	none	5.91	263	172	16.3	
15	1448		Brownish RED	none	6.62	267	419	15.9	
20	1503		Brownish RED	none	6.65	265	179	15.9	

Notes:

RUST E&I Albany, NY (518) 458-1313	**Test Boring Log**	Boring No. MW-6
PROJECT: Brenner Drive CONGERS, N.Y.		Sheet 1 of 3
CLIENT: WILSONART INTERNATIONAL, INC.		Job No. 20350Z.10100
DRILLING CONTRACTOR: PARRATT-WOLFF, INC.		Meas. Pt. Elev. 179.45'
PURPOSE: LIMITED SUBSURFACE INVESTIGATION		Ground Elev. 177.3'
DRILLING METHOD: AIR ROTARY HOLLOW STEM AUGER	SAMPLE / CORE / CASING	Datum: amsl
DRILL RIG TYPE: IR A-300	TYPE: SS / -- / HSA / Air	Date Started: 10-15-98
GROUNDWATER DEPTH: 11.19'	DIAM.: 2" O.D. / -- / 4¼" I.D. / 4"	Date Finished: 10.15.98
MEAS. PT.: PVC	WEIGHT: 140#	Driller: Glen Lansing
DATE OF MEAS.: 10.16.98	FALL: 30"	Inspector: Mark Williams

Depth (Feet)	Sample Number	Blow Count	Unified Classification	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS
0	S-1	4			Rdsh Br Cy $ sd(-), FS, t(-)FG; occ. gneiss cbl/bldr frag; med. dense to dense; occ. mtld; moist	Rec.= 1.4' MOIST TO DRY HNu H.S.= 0 ppm
1		13				
		16				
2		19				
	S-2	15			Br-Rdsh Br $ sd(-), FS, t FG; occ. cbl/rk frag; v. dense; moist to dry.	Rec.= 1.7' MOIST TO DRY HNu H.S.= 0 ppm
3		31				
		40				
4		24				
	S-3	18			Rdsh Br - Br Cy $ sd(-), FS, t(-)FG; occ. gneiss & Brunswick rk. frags; med. dense to dense; moist	Rec.= 2.0' MOIST HNu H.S.= 0 ppm
5		16				
		15				
6		9				
	S-4★	14			Br Cy $ sd(-), FS, mF(-)G; freq. Rdsh Br $ stone/SS rk frag [7.0'+]; med. dense to dense; dry.	Rec.= 1.35' Dry HNu H.S.= 0 ppm
7		15				
		16				
8		13				
	S-5★	16			Rd Br - Br Cy $ sd(-), FS, lGl mF(-)G; occ. cbl/rk frag; med. dense to dense; dry.	Rec.= 0.85' DRY HNu H.S.= 0 ppm
9		25			Br Cy $ sd(-), FS, mF(-)G; freq. cbl/rk frags; dense; dry.	
		20				
10		20			(GLACIAL TILL)	

RUST E&I Albany, NY (518) 458-1313	**Test Boring Log**	Boring No. MW-6
PROJECT: HUDSON TECHNOLOGIES, INC. Brenner Drive		Sheet 2 of 3
CLIENT: WILSONART INTERNATIONAL, INC.		Job No. 203502.10100

Depth (Feet)	Sample Number	Blow Counts	Unified Classification	Visual Log Description	Geologic Description	Remarks
	S-6	26 16 14 12			Br cmf(+)S, sGrlCy$, trFG; occ. to freq. cbl/rk frags. last 0.2' was Br cmFS, s$/sC, tr FG	Rec = 1.45' Moist HNu H.S. = 0 ppm
12	S-7	17 15 17 13			Same; wet; lower 0.6' is Rdsh Br $ sC1, FS, lCYFG; occ. rk frag; dense; dry.	Rec = 1.2' Dry (wash is wet) HNu H.S. = 0 ppm
14	S-8	50/0.1'			14.1' Rdsh Br $ stone rk chips noted	-- switched to AIR ROTARY DRILLING TECHNIQUES
15						
20	S-9				Rdsh Br $ stone & fine SS rk chips NOTED.	CUTTINGS
25'					(BEDROCK)	

RUST E&I Albany, NY (518) 458-1313	**Test Boring Log**	Boring No. MW-6
PROJECT: HUDSON TECHNOLOGIES, INC. Brenner Drive		Sheet 3 of 3
CLIENT: WILSONART INTERNATIONAL, INC.		Job No. 20352.1010

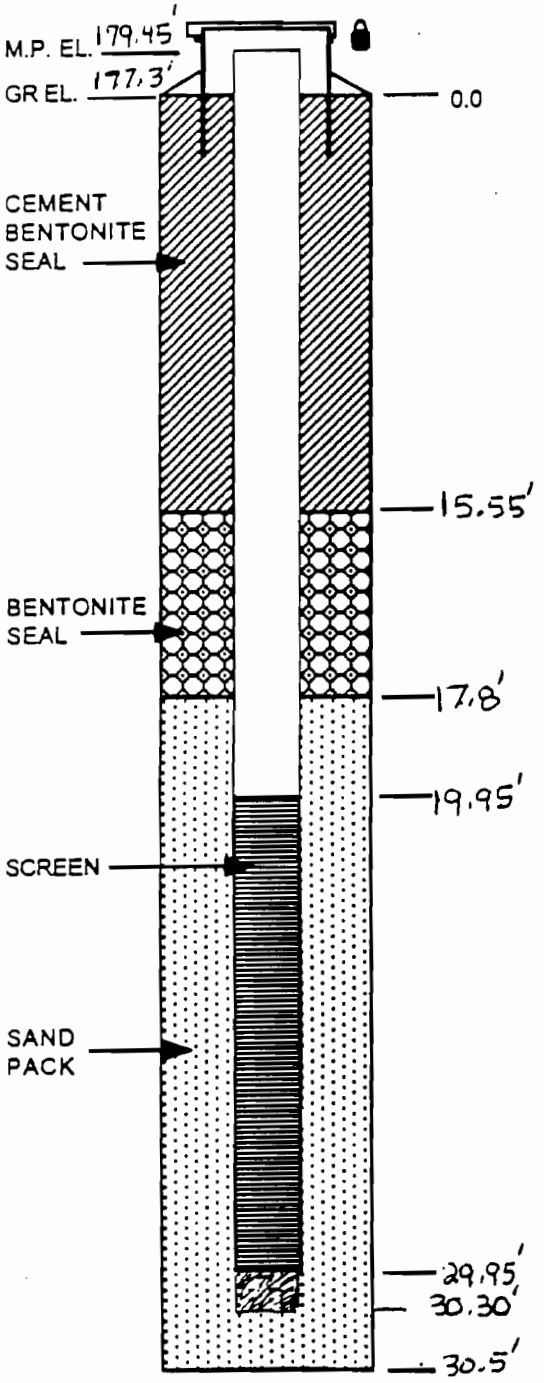
Depth (Feet)	Sample Number	Blow Counts	Unified Classif-ication	Visual Log Description	Geologic Description	Remarks
25'						
					Rdsh Br $ stone/fine ss rk chps noted, wet.	
	S-10					
30					(BEDROCK) 30.5'	★ = SOIL SAMPLE SUBMITTED FOR LABORATORY ANALYSIS [EPA METHOD 8260 plus dichlorodifluoromethane]
					TOTAL DEPTH OF BORING = 30.5' BGS	

MONITORING WELL COMPLETION LOG WELL NO. MW-6

Rust Environment & Infrastructure
12 Metro Park Road
Albany, NY 12205
(518) 458-1313

Project HUDSON TECHNOLOGIES, INC. BRENTER
Client WILSONART INTERNATIONAL, INC.
Location CONGERS, N.Y.
Project No. 203502.10100
Date Drilled 10.15.98
Date Developed 10.16.98

WELL CONSTRUCTION DETAIL



NOT TO SCALE

INSPECTION NOTES

Inspector M.A. WILLIAMS
Drilling Contractor PARRATT-WOLFF, INC.

Type of Well GROUNDWATER MONITORING
Static Water Level 11.19 ' Date 10.16.98
Measuring Point (M.P.) TOP OF PVC
Total Depth of Well 30.28' BGS

Drilling Method
Type Hollow Stem Auger/AIR ROTARY Diameter 4 1/4" I.D. / 4" I.D.
Casing STEEL

Sampling Method
Type SPLIT-SPOON Diameter 2" O.D.
Weight 140# Fall 30"
Interval 0-2', 2-4', 4-6', 6-8', 8-10', 10-12', 12-14', 20', 25', 30'

Riser Pipe Left in Place
Material Schedule 40 PVC Diameter 2" I.D.
Length 22.27' Joint Type Flush, Threaded

Screen
Material Schedule 40 PVC Diameter 2" I.D.
Slot Size 0.010" Length 10'
Stratigraphic Unit Screened UPPER BEDROCK (Upper Triassic Brunswick Silt Sto.

Filter Pack
Sand X Gravel _____ Natural _____
Grade 0 Unimin
Amount 220 # Interval 19.95' - 29.95'

Seal(s)
Type BENTONITE (40#) Interval 15.55-17.8'
Type CEMENT-BENTONITE Interval 3-15.55'
Type CONCRETE Interval 0-3'

Locking Casing ☒ Yes ☐ No
Notes:

RUST ENVIRONMENT & INFRASTRUCTURE

WELL DEVELOPMENT LOG

PROJECT INFORMATION

Project Name: WILSCHART INTERNATIONAL, INC.
Project No.: 203502.10100
Date: 10.16.98
Personnel: M.A. WILLIAMS

WELL INFORMATION

Well I.D.: MW-6
Screen diameter (inches): 2" I.D.
Screen length (feet) 10'
Riser diameter (inches) 2" I.D.
Depth to Water (ft) : 11.19' (BMP)
Well Depth (initial): 30.28' (BGS)
Well Volume: (gals) 3.5 gallons

DEVELOPMENT INFORMATION

Time Start: 15:10 Time Finish: 16:35
Method: HAND BAILER
Volume Removed (gals.): 25 gallons
Well Depth (final): 30.30' BGS
Sand/Silt Accumulation: ~0.02'

GW QUALITY PARAMETERS

Gallons	Time	DTW	Color	Odor	pH	Conductivity	Turbidity	Temp (C)	Observations
3.5	1510		~~Brownish~~ RED	NONE	7.30	940	>999	14.3	
7	1525				7.25	940	>999	13.7	
10.5	1540				7.09	950	>999	13.5	
14	1550				6.98	950	>999	13.3	
17.5	1600				7.03	940	>999	13.0	
25	1635				7.01	940	>999	13.1	

Notes:

APPENDIX H

Health and Safety Plan

APPENDIX H

Health and Safety Plan

APPENDIX I

NYSDOH Generic Community Air Monitoring Plan

New York State Department of Health
Generic Community Air Monitoring Plan

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical-specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for volatile organic compounds (VOCs) and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate NYSDEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a **continuous** basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

All 15-minute readings must be recorded and be available for State (DEC and DOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored **continuously** at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

All readings must be recorded and be available for State (DEC and DOH) personnel to review.

June 20, 2000

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APPENDIX J

NYSDEC Data Usability Summary Report Guidance Policy

WORK ELEMENT V - Quality Assurance/Quality Control Activities

Data Validation Scope of Work - NYSDEC RI/FS Program

Data validation is the systematic process by which the data quality is determined with respect to data quality criteria that are defined in project and laboratory quality control programs and in the referenced analytical methods. The data validation process consists of an assessment of the acceptability or validity of project data with respect to stated project goals and requirements for data usability. Ideally, data validation establishes the data quality in terms of project data quality objectives. Data validation consists of data editing, screening, checking, auditing, certification, review, and interpretation. The purpose of data validation is to define and document analytical data quality and determine if the data quality is sufficient for the intended use(s) of the data. In accordance with DEC requirements, all project data must be of known and acceptable quality. Laboratories will be required to submit results which are supported by sufficient back-up data and QA/QC results to enable the reviewer to conclusively determine the quality of data.

Duties and Qualifications of a Data Validator

The following qualifications and requirements are established for all Engineers/Contractors functioning as data validators. These qualifications and requirements should apply whether the Engineer/Contractor is: a) retained directly through contracts executed by this agency, b) retained as a subcontractor to a Engineer functioning under contracts executed by this agency, or c) retained by a responsible party functioning under the guidance and direction of an order on consent. Engineer/Contractor functioning as a data validator shall be independent of the laboratory generating the data.

The Engineer/Contractor functioning as a data validator should be able to demonstrate that all staff members involved in the data validation process have: a) a bachelors degree in chemistry or natural sciences with a minimum of 20 hours in chemistry or equivalent, b) one (1) year experience or equivalent in the implementation and application of the protocol(s) used in generating the data for which they are responsible. The successful completion of an EPA data validation training course or equivalent, as evidenced by a certificate of completion, may be substituted for the analytical experience requirement. In addition, these same staff members must have a minimum of one (1) year experience evaluating CLP data package for contract and protocol compliance.

The Engineer must provide the resume of the proposed third party data validator along with a recent data validation report prepared by that validator for review and approval by the Division of Hazardous Waste Remediation Quality Assurance Officer.

Consistent with the Division's Quality Assurance Program Plan, all laboratory data generated in support of any investigation, remediation or monitoring activity carried out under the Division's program responsibility shall be developed under the administrative and operational control of a Quality Assurance Project Plan (QAPjP). To this end the QAPjP shall become an integral part of the Project Work Plan and those portions that pertain to the development and production of analytical data shall define the task of the laboratory charged with developing and producing this data. The QAPjP, as part of the Project Work Plan shall include the following information:

1) The number and types of samples that are to be analyzed.

2) The sample holding times that must be observed and the time from which these holding times shall be measured.

3) The list of analytes to be identified and quantified during the analytical process.

4) The site specific limits of concern for each of the analytes listed in each of the matrices to be sampled.

5) The matrix specific method detection limits that must be obtained for each of the analytes and matrices listed (this value should be in the neighborhood of 1/5 the site specific limit of concern).

6) The analytical protocols that shall be employed including any special handling or cleanup procedures that may be required.

7) The frequency and types of any required quality control samples e.g., trip blanks, rinse blanks, replicates, matrix spikes, matrix spike duplicates, and matrix spike blanks.

8) The identification of any critical samples and any special analytical treatment that they may require.

9) The required deliverables and supporting documentation where these differ from or are not a part of the required analytical protocols.

In order to facilitate the data validation process, copies of the project Work Plan, Quality Assurance Project Plan (addressing the above referenced nine points of information), together with the project required deliverables and supporting documentation, and laboratory subcontract shall be submitted to the firm contracted to carry out the data validation portion of the standby contract.

Task I. Completeness

The Validator shall review the data package to determine completeness. A complete data package will consist of the following eight (8) components:

1) All sample chain of custody forms.

2) The case narrative(s) including all sample/analysis summary forms.*

3) Quality Assurance/Quality Control summaries including all supporting documentation.

4) All relevant calibration data including all supporting documentation.

5) Instrument and method performance data.

6) Documentation showing the laboratory's ability to attain the contract specific method detection limits for all target analytes in all required matrices.

7) All data report forms including examples of the calculations used in determining final concentrations.

8) All raw data used in the identification and quantitation of the contract specified target compounds.

* These forms appear as an addendum to the NYSDEC CLP forms package and will be required for all data submissions regardless of the protocol requested.

All deficiencies in the requirement for completeness shall be reported to the Engineer immediately. The laboratory shall be contacted by the consultants QAO and shall be given ten (10) calendar days to produce the documentation necessary to remove the deficiencies.

Task II. Compliance

The Validator shall review the submitted data package to determine compliance with those portions of the work plan that pertain to the production of laboratory data. Compliance is defined by the following criteria.

1) The data package is complete as defined in Task 1 above.

2) The data has been produced and reported in a manner consistent with the requirements of the QAPjP and the laboratory subcontract.

3) All protocol required QA/QC criteria have been met.

4) All instrument tune and calibration requirements have been met for the time frame during which the analytes were completed.

5) All protocol required initial and continuing calibration data is present and documented.

6) All data reporting forms are complete for all samples submitted. This will include all sample dilution/concentration factors and all premeasurement sample cleanup procedures.

7) All problems encountered during the analytical process have been reported in the case narrative along with any and all actions taken by the laboratory to correct these problems.

The data validation task requires that the Validator conduct a detailed comparison of the reported data with the raw data submitted as part of the supporting documentation package. It is the responsibility of the Validator to determine that the reported data can be completely substantiated by applying protocol defined procedures for the identification and quantitation of the individual analytes. To assist the Validator in this determination the following documents are recommended; however, the EPA Functional Guidelines will be used for format only. The specific requirements noted in the Project Quality Assurance Project Plan are prerequisite, for example, holding times or special analytical project needs, to those noted in the Functional Guidelines.

a) The particular protocol(s) under which the data was generated e.g., NYSDEC Contract Laboratory Protocol; EPA SW-846; EPA Series 500 Protocols.

b) Data validation guidance documents such as:

i) "Functional Guidelines for Evaluation Inorganic Data" (published by EPA Region 2).

ii) "Functional Guidelines for Evaluation Organics Analyses" Technical Directive Document No. HQ-8410-01 (published by EPA).

iii) "Functional Guidelines for Evaluating Pesticides/PCB's Analyses" Technical Directive Document No. HG-8410-01 (published by EPA).

NOTE: These documents undergo periodic revision. It is assumed that the selected firm will have access to the most current applicable documents and guidelines.

The Validator shall submit a final report covering the results of the data review process. This report shall be submitted to the Project Manager or his designee and shall include the following:

1) A general assessment of the data package as determined by the accomplishment of Tasks I-II above.

2) Detailed descriptions of any and all deviations from the required protocols. (These descriptions must include references to the portions of the protocols involved in the alleged deviations).

3) Any and all failures in the Validator's attempt to reconcile the reported data with the raw data from which it was derived. (Again, specific references must be included). Telephone logs should be included in the validation report.

4) A detailed assessment by the Validator of the degree to which the data has been compromised by any deviations from protocol, QA/QC breakdowns, lack of analytical control, etc., that occurred during the analytical process.

5) The report shall include, as an attachment, a copy of the laboratory's case narrative including the DEC required sample and analysis summary sheets.

6) The report shall include an overall appraisal of the data package.

7) The validation report shall include a chart presented in a spread sheet format, consisting of site name, sample numbers, date submitted to laboratory, year of CLP or analytical protocol used, matrix, fractions analyzed, e.g., volatiles, semi-volatiles, Pest/PCB, Metals, CN. Space should be provided for a reference to the NYSDEC CLP when non-compliance is involved and a column for an explanation of such violation (See following form).

Group #	*Date*	*ASP Proto No.*	*Sample No.*	*Matrix*	*VOA Compli-ancy*	*BNA Compli-ancy*	*Pest/PCB Compli-ancy*	*Metals Compli-ancy*	*CN*	*Total Phenols*	*Page # in the CLP*	*Non-Compliance*

Data Usability Summary Report (DUSR)

Background:

The purpose of the DUSR is to provide a thorough data evaluation by an experienced environmental scientist and/or the project Quality Assurance Officer.

Since it is recommended that Data Validation Reports be prepared by an independent third party (i.e., independent of the project management consulting firm and the analysis laboratory), the DUSR is an appropriate alternative when data quality and usability are not expected to be a significant issue. In these cases, the DUSR is an appropriate alternative since it is more cost effective and time efficient than data validation.

The DUSR and data deliverables will be reviewed by the NYSDEC Quality Assurance Unit. In most cases, we expect this review will result in agreement or minor differences which should be easily reconciled. If data validation is found to be necessary (e.g., pending litigation), it can be done at a later date by an independent third party on the data deliverable package.

Preparation of a DUSR on a NYSDEC ASP Category B or CLP Deliverables Package

The Environmental Scientist preparing the DUSR should submit a resume to the NYSDEC Quality Assurance Unit documenting relevant experience in environmental sampling and analysis methods and data review and statement of Bachelors Degree in Natural Science or Engineering.

The DUSR is prepared by reviewing and evaluating the analytical data. The parameters to be evaluated in reference to compliance with the analytical method protocols include all sample chain-of-custody forms, holding times, raw data (instrument print out data and chromatograms), calibrations, blanks, spikes, controls, surrogate recoveries, duplicates and sample data. If available, the Field Sampling Notes should also be reviewed and any quality control problems should

be evaluated as to their effect on the usability of the sample data. Laboratories shall still be required by the Engineer to produce supporting validation packages to support a full data review.

The DUSR describes the samples and analysis parameters reviewed. Data deficiencies, analytical method protocol deviations and quality control problems are described and their effect on the data is discussed. An assessment is made as to whether the data is of sufficient quality to be used for the purposes intended in the project.

Resampling/reanalysis recommendations are made. Data qualifications are documented for each sample analyte following the NYSDEC Analytical Services Protocol '91 Rev. guidelines.

Contact the NYSDEC, Division of Hazardous Waste Remediation, Quality Assurance Unit, at (518) 457-3252, with any questions.

WORK ELEMENT VI - Site Response Activities

Conditions at hazardous waste sites often require immediate response actions in order to protect human health and the environment. Under this Work Element the Engineer will be expected to provide all labor, material and professional services (e.g., specifications, health and safety plans, quota solicitations), either directly or through subcontract, to perform the following site response activities:

1) well drilling and installation
2) soil boring
3) water, soil, air, material sampling
4) monitoring well closures
5) site security
6) drum removals (above and below ground)
7) contaminated soil removal
8) tank waste disposal and tank cleaning
9) leachate collection facility pumpouts.
10) geophysical exploration
11) water supply

When these activities require the retention of a subcontractor to perform the work, the Engineer will be responsible for managing and overseeing the work of the subcontractor to ensure acceptable performance under the contract.

WORK ELEMENT VII - Operation and Maintenance

Many remediated sites require post-remediation operation, maintenance and monitoring. The Engineer shall develop (if needed) and manage site-specific operation, maintenance and monitoring programs which may include, but are not necessarily limited to, the following activities:

Site Maintenance

- snow removal
- mowing and fertilization
- fence repair
- drainage control
- erosion control
- well repair, redevelopment or replacement
- revegetation
- access road maintenance
- vermin control

February 2, 2001

Mr. Dale Desnoyers
Chief, State Superfund & Voluntary Cleanup
Division of Environmental Enforcement
Room 410A
New York State Department
of Environmental Conservation
50 Wolf Road
Albany, New York 12233-5550

RE: VCP Agreement , Index No. R2-0021-00-08
1 Brenner Drive, Congers, New York

Dear Mr.Desnoyers,

Wilsonart International, Inc. (Wilsonart) is herewith providing ground water monitoring results from our November 17, 2000 sampling of the 9 installed wells (10 water samples), and 10 soil samples (4 from test pits, 6 from subsurface samples at wells) collected in October. Also enclosed is a brief status report of activities and findings to date, for Wilsonart's former Congers distribution center.

Wilsonart believes that the findings to date support our original contention that Wilsonart did not cause this contamination. Also, Freon-113 and TCE, primary contaminants recently discovered in the private drinking water wells, are not substances that Wilsonart stored or distributed, or ever used at our distribution center. Furthermore, the groundwater flow data indicates an east to west flow characteristic for our former site, and, with the water results for the site, supports a conclusion of an off-site upgradient source that is migrating onto the1 Brenner Drive property, via groundwater.

Wilsonart believes that the NYSDEC should begin diligent and concerted efforts to investigate practices and groundwater quality for industrial sites and properties to the northeast, east and southeast of the 1 Brenner Drive location.

If you have any questions regarding this information, please call me at 254-207-2437.

Sincerely,

Emil Studinka
Director Regulatory/Safety Services

cc: Mr. Chris Alonge
NYSDEC-Albany

March 20, 2001

Mr. Christopher Alonge, Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Eastern Remedial Action, Room 242
50 Wolf Road
Albany, New York 12233-7010

Subject: **Additional Site Characterization**
NYSDEC Voluntary Cleanup Program Site#: V-00322-3
Wilsonart International, Inc., 1 Brenner Drive, Congers, New York

Dear Mr. Alonge:

This work plan is for Earth Tech, Inc. to assist Wilsonart International, Inc. (Wilsonart) in the completion of additional tasks for the focused environmental investigation of the above-referenced Site (Figure 1).

The purpose of the investigation is to compile and develop factual information to address Wilsonart's contention that the FREON-113 and trichloroethene (TCE) impacted groundwater detected on-site, and in the region, is the result of an off-site source(s) unrelated to Wilsonart's past use of the property. The objective of performing this additional work is to fulfill investigatory commitments made by Wilsonart to the New York State Department of Environmental Conservation (NYSDEC) and Rockland County Department of Health (RCDH) to get to the endpoint of Wilsonart's involvement with the voluntary cleanup program.

SCOPE OF SERVICES

The additional site characterization activities consist of the sampling of the Kunz residence well (6 Lakewood Avenue), collection of additional existing data (i.e., collect and review available Sanborn mapping), completion of a photo-lineament analysis, and collection of another round of groundwater samples at the Site. These four additional work items (two are already completed) are described below:

Sampling of Water Tap at the Kunz Residence Water Well *(This activity has been completed but is included herein because is part of the "Additional Site Characterization")*

Standard protocol will be to allow a sampling tap to run for at least fifteen minutes prior to sampling to insure that representative water is in the system. After purging, the well water collected from the tap will be analyzed for EPA Method 524.2 and FREON-113. Volatile organics samples will be overfilled in forty milliliter (ml.) vials and capped and then checked to insure that no air bubbles are trapped in the vial. Care will be taken to minimize agitation and to immediately place sample containers on ice to prevent volatization. A trip blank will

accompany the well water sample during transport to the laboratory. This will be done for quality assurance / quality control measures. Volatile organic analytical services will be provided by Adirondack Environmental Services, Inc. of Albany, New York.

Schedule
As directed by Wilsonart, Earth Tech sampled the well water at the Kunz residence on Friday February 9, 2001. Analytical results were received on Friday February 16, 2001. The groundwater quality results were verbally communicated to Mrs. Kunz on Friday February 16, 2001. An Earth Tech memo, dated February 19, 2001, summarized the analytical results to the Kunz family. The memo and analytical data was also conveyed to the NYSDEC, NYSDOH, RCDH, and Wilsonart.

Review of Sanborn Maps

Earth Tech will obtain and summarize information from available Sanborn historical fire insurance maps that depict prior uses of nearby properties in the suspected source areas. It is our objective to obtain and review Sanborn mapping for parcels to the east (upgradient) of the Site that may indicate potential concerns. The results of the review of Sanborn mapping will be included in Section 1.1, Records Review, of the Subsurface Investigation Report.

Schedule
The Sanborn maps were ordered from Environmental Data Resources, Inc. on February 12, 2001. Earth Tech will summarize preliminary findings of the Sanborn mapping during the week of March 19, 2001.

Photo-Lineament Analysis *(This activity has been completed but is included herein because is part of the "Additional Site Characterization")*

Earth Tech will oversee the photo-lineament analysis of the study area to better understand and identify observable, natural linear features (bedrock fractures, joint traces or lineaments) in the bedrock. Fracture zones or areas of fracture concentration in the underlying bedrock are typically areas of higher permeability and may serve to control the pathways of bedrock groundwater flow in the region. The results of the photo-lineament analysis will be added to Section 1.3, Review of Aerial Photographs, of the Subsurface Investigation Report.

Schedule
The aerial photographs were ordered from Mr. Robert W. Shuey, P.G. on February 8, 2001. The aerial photographs were received by Earth Tech on March 2, 2001. The fracture trace analysis was performed by Mr. Samuel Gowan, Ph.D. on March 7, 2001. Earth Tech will summarize preliminary findings of the photo-lineament analysis by March 23, 2001.

Groundwater Sampling and Analysis

The typical approach to sampling wells for VOCs involves purging three casing volumes of water prior to collecting a groundwater sample. The November 2000 groundwater samples of on-site wells were collected using this methodology. We understand that the Department, NYSDOH, and RCDH recognize that there is "a likely upgradient off-site source that is a contributing component to the observed groundwater contamination at the Wilsonart Site". Although significant levels of FREON-113 and TCE were observed in wells MW-5, MW-7, and MW-8, which are upgradient of well MW-3, the highest concentration of contaminants have been detected at on-site well MW-3.

Earth Tech researched the sampling methodology employed and came across numerous technical abstracts that indicated that removal of three to five well volumes, prior to sampling, may be unnecessary, or may produce undesirable effects (i.e., integration of differing water types). Since newly-installed monitoring wells MW-7 and MW-8 had slotted screens 20 feet in length, it is possible that the groundwater chemistry detected previously in these two wells may be somewhat diluted in comparison to values observed at well MW-3 which had a 10-foot screen. For example, the concentration of TCE at MW-8 (91 ug/L) was roughly one-half the concentration of TCE reported previously at well MW-3 (180 ug/L).

Earth Tech proposes to collect groundwater samples in three phases to assess the potential for dilution, stratification, and temporal changes.

Phase 1 A Kemmerer sampler to collect depth discrete groundwater samples to characterize groundwater quality in the vicinity of the wells. This sampler was selected based on review of other samplers that can be used to discern potentially significant vertical concentration differences (including stratification and dilution) in the wells. The phenomenon of dilution and vertical stratification is a distinct possibility given the nature of the local aquifer and well construction differences. Prior to conducting the second groundwater sampling event, a Kemmerer sampler will be gently lowered with a support line to a desired depth (i.e., 1 to 2 feet from the bottom of well) at monitoring wells MW-3 and MW-8. The sampler will be secured and allowed to equilibrate overnight. In the following morning, each Kemmerer sampler will be "struck", closing both ends of the sampler. The Kemmerer will be raised through the water column and the collected groundwater will be transferred into 40 ml. vials for subsequent laboratory analysis. Each dedicated Kemmerer will be decontaminated, as described in Attachment A, and temporarily stored in a secure area (i.e., inside vehicle).

Phase 2 In order to compare results from the first groundwater sampling event (November 2000), an additional round of groundwater samples [MW-1 through MW-9] will be collected from the wells, via disposable bailer, after three volumes have been removed. All groundwater samples will be analyzed for VOCs (EPA Method 8260), FREON-113, plus tentatively identified compounds.

Phase 3 In order to compare results with the Phase 1 groundwater sampling activity, wells MW-3 and MW-8 will then be redeveloped using a weighted PVC bailer. The water column will be bailed from the base of the well. Once an additional five well volumes have been purged, the dedicated, and decontaminated, Kemmerer will be re-lowered to the previously-attained depth (i.e., 1 to 2 feet from bottom of well) at wells MW-3 and MW-8. Each Kemmerer will be secured until the messenger is "struck", effectively closing both ends of the sampler. The Kemmerer will then be raised through the water column and the collected groundwater will be transferred into preserved 40 ml. vials for subsequent laboratory analysis.

In addition to the groundwater sampling, Earth Tech will record groundwater levels to further define groundwater flow patterns at the Site. Earth Tech will also measure and record in-well water temperatures (wells MW-3, MW-5, MW-7, and MW-8) to assess localized horizontal flow zones and in-well groundwater flow, and gain insight into Site groundwater quality trends due to inflections of the temperature logs. Earth Tech will log temperature profiles before purging and after purging each applicable monitoring well.

Assumptions

- All groundwater samples will be analyzed for VOCs (EPA Method 8260), FREON-113, plus tentatively identified compounds.
- Category B deliverables will be provided for quality assurance/quality control purposes.
- Purge water will require containerization in six 55-gallon drums.

Schedule
It is anticipated that the sampling and associated activities will take place during the latter half of the week of March 19, 2001 (i.e., March 22 and 23, 2001).

Earth Tech has already initiated work pertaining to these supplemental tasks. Please contact the undersigned when you are ready to discuss or present your comments to the attached Work Plan. Thank you in advance for your anticipated cooperation. Please contact me at (254) 207-2437 or studine@wilsonart.com or Mark Williams of Earth Tech at (518) 437-8368 or mark_williams@earthtech.com, should you have any questions regarding this amended work plan.

Very truly yours,

Wilsonart International, Inc.

Emil Studinka
Director, Regulatory and Safety Services

Enclosures: As Noted

c. Paul Maxwell, Wilsonart International, Inc.
John Olm, NYSDOH BEEI
Daniel Miller, Ph.D., Rockland County Department of Health
Mark Williams, Earth Tech

New York State Department of Environmental Conservation

Division of Environmental Remediation

Bureau of Eastern Remedial Action, Room 242
50 Wolf Road, Albany, New York 12233-7010

Phone: (518) 457-3395 ∃ **FAX:** (518) 457-4198

Website: www.dec.state.ny.us

March 21, 2001

Mr. Emil Studinka
Wilsonart International, Inc.
2400 Wilson Place
PO Box 6110
Temple, Texas 76503-6110

RE: NYS DEC Voluntary Cleanup Program Site#V-00322-3
Wilsonart International, Inc., 1 Brenner Drive, Congers, New York
Response to March 20, 2001, Additional Site Characterization letter

Dear Mr. Studinka:

Please be advised that the Department has reviewed the above referenced letter, and conceptually agrees with the majority of the expanded investigation tasks represented within the letter. However, the first task consisting of sampling one homeowner well in the vicinity of the site should not be included as a task within the expanded site investigation. This additional task should be referred to as being outside the scope of the expanded site investigation, and completed as a courtesy to the homeowner and the RC DOH.

The Department understands that the majority of the expanded investigation tasks have been initiated or scheduled to commence shortly. However, the associated amended work plan has not yet been received and reviewed by the Department. The Department further understands that the additional groundwater sampling tasks are scheduled to occur this week, and in the interest of not delaying the intended schedule, it is understood that the sampling techniques, decontamination procedures and analytical procedures shall be consistent with the techniques and procedures identified within the initial investigation work plan, along with the modifications addressed within the referenced letter. Please provide eight copies of the amended work plan, to allow for copies to be distributed to all appropriate parties and the associated document repositories.

Upon review of the data from the additional round of groundwater samples and depth discrete groundwater samples, including appropriate analysis for Freon 113, the Department will review the data and determine if the data supports the conclusion that the observed groundwater contamination is most likely related to an off-site upgradient source. If this conclusion is verified, efforts will be undertaken regarding the issuance of the release.

The Department appreciates your efforts to satisfy the requirements of the VCP in regards to this site. If there are any questions regarding this letter I can be reached at (518) 457-3395.

Sincerely,

Christopher G. Alonge
DEC DER Project Manager

cc: John Olm - NYS DOH BEEI (by e-mail)
Daniel Miller, Ph.D. - RC DOH (by e-mail)
Kevin Carpenter, P.E. - NYS DEC DER BERA RSB (by e-mail)
Ram Pergadia, P.E. - NYS DEC DER Region 3 (by e-mail)
Michael Lesser, Esq. - NYS DEE Albany (by e-mail)
Mark Williams - Earth Tech
file

FOLDABLE

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Eastern Remedial Action, 11th Floor
625 Broadway, Albany, New York 12233-7015
Phone: (518) 402-9620 • FAX: (518) 402-9022
Website: www.dec.state.ny.us

Erin M. Crotty
Commissioner

FILE COPY

September 23, 2002

Mr. Paul Maxwell
Wilsonart International
2400 Wilson Place
Post Office Box 6110
Temple, Texas 76503-6110

Mr. Mark Williams
Earth Tech
40 British American Blvd, 1st floor
Albany, New York 12110

RE: NYS DEC Voluntary Cleanup Program Site#V-00322-3
Wilsonart International, Inc., 1 Brenner Drive, Congers, New York
Draft Subsurface Investigation Report Review Comments

Dear Messrs. Maxwell and Williams:

Please be advised that the Department has reviewed the above referenced document, and has also sent a copy of the document to the NYS Department of Health for appropriate review by the Bureau of Environmental Exposure Investigation (NYS DOH). A copy was also sent to the Rockland County Department of Health (RC DOH) for appropriate review.

The NYS DOH , RC DOH and the Department have conferred regarding review of the draft investigation report. While the information included within the report appears to be fairly complete and representative of the tasks undertaken during the investigation, several items appeared to be represented inaccurately. Following is a listing of items which should be revised appropriately and then the revised report should be submitted for final report approvals.

- **Section 1.1 - Project Understanding** - A copy of the referenced supplemental work plan should be included within the appendices and referenced within this section as a modification to the initially approved work plan. Also, the report indicates in this section that a copy of the work plan comment correspondence was included within Appendix A, however this documentation was not apparent. Please modify the appendices accordingly.

- **Section 2.10 - Investigation-Derived Waste Management** - A summary of the waste characterization results should be included here along with final disposition of all investigation-derived waste (IDW). An accounting of all waste containers generated on-site should also be included in this section. In addition, copies of waste manifests should be included in the report for all IDW transported from the site.

- **Section 4.2.2 - Site Bedrock Geology** - MW-7 is listed as having the maximum bedrock drilling depth at 45'bgs. However, the remainder of the report indicates that MW-8 is actually the deepest bedrock well at 45'bgs, while MW-7 was drilled to 41'bgs. Please resolve this conflict in information.

- **Section 5.25 - Groundwater Flow Velocity and Travel Time** - Two different flow velocities are used to calculate the travel time from MW-8 to MW-9 and MW-8 to MW-3. Please indicate which flow velocity is more accurate of actual groundwater conditions at the site and provide a basis for the interpretation, as the range in values appears to be substantial.

- **Section 7.3.2, page 35** – The second sentence does not indicate the distance that Toms Brook is from the site. This section should simply indicate that the suspected exposure pathways associated with surface water and sediment can be eliminated based on site characterization information that shows these media are not contaminated. As such, it would not be necessary to further define the pathway (i.e., there would be no need to discuss exposure frequency or receptor populations);

- **Section 7.3.3, page 36** – The next to last sentence in the second paragraph incorrectly states that the RC DOH "mandated" the discontinuance of private wells downgradient of the site which were contaminated with TCE, PCE or Freon-113 at concentrations exceeding standards for public drinking water supplies. The RC DOH did not "mandate" that homes stop using their contaminated water supply wells. They did, however, notify all affected residents that their water had contaminants at concentrations exceeding MCLs, and recommended that they discontinue use of the water. RC DOH also distributed bottled water (supplied by Wilsonart) to those residents until they could establish a connection to public water. To RC DOH's knowledge, all homes that were identified as having water with contaminants exceeding MCLs have been connected to the public water supply.

  Also, Restaurant X, which is not hooked to public water supply, had concentrations very close to the MCL, but has installed a treatment system as a temporary measure. Negotiations are also underway between the town of Clarkstown and the local water company to get the water main extended up 303 to serve Restaurant X and other residences in the area.

  NYS DOH does not agree with the conclusion that the future construction/utility worker scenario represents a completed exposure pathway. This is based on the fact that subgrade utilities are generally not installed into the groundwater table. It is unlikely that future construction activities would purposely involve excavating to depths below the groundwater table, and workers would be using personal protective equipment in accordance with health and safety protocols.

- **Section 7.3.4, page 37** – According to NYS DOH, this section should simply indicate that the suspected exposure pathways associated with contaminated soil gas and its potential

affects on ambient air quality can be eliminated. This conclusion is based on factors involving the sources and transport/migration of contamination (i.e., the groundwater contamination is at appreciable depth and there is a significant dilution effect encountered once VOCs in soil gas are released into the atmosphere).

- **Section 7.3.5, page 37** – As no soil or groundwater samples were collected from beneath the former Wilsonart building, the potential for impacts to air quality within the building from the intrusion of contaminated soil gas cannot be supported by the available data. However, NYS DOH considers the potential for impacts to indoor air quality on and off-site very remote given the total concentrations of VOCs detected in on-site groundwater within shallow bedrock are less than one part per million (i.e., the levels detected would present marginal impacts to the surrounding soil gas medium). In addition, the local geology is not conducive to soil gas transport/migration, and the on-site building does not possess a basement. Therefore, NYS DOH has agreed to basically rule out any suspected or possible exposure pathways involving contaminated soil gas at the site building.

- **Section 7.4.3, page 38** - There are additional residences served by private water supply wells that had detections of Freon and/or TCE at concentrations below the MCL. Until the source is located and remediated, the contaminant plume will likely continue to migrate southward, eventually impacting additional private wells. Concentrations in somes wells that are still in use could rise above the MCL.

- **Section 8.1 Summary and Conclusions, page 41** - It is indicated that "the horizontal groundwater flow rate in the upper bedrock zone is estimated to be between 0.75 and 1.8 feet per year". Please revise this statement to be consistent with outstanding revisions to Section 5.25.

- **Regarding the DUSRs:**

  The comments and data qualifiers contained within the DUSRs are appropriate as described. However, the Summary Data Packages have **not** been updated/edited to include the data qualifiers described in the DUSRs.

  The Organic Data Usability Summary Report for SDG # MW-1 (2) is incomplete. There are no dates or signatures of preparation or review.

  Additionally, it should be noted that page 2 of 2 of the Organic Data Usability Summary Report for SDG # MW-1 is missing the date signed by the preparer

- **Figures:**

  Figures 12 & 13 - Please revise figure to include property boundaries and also to include contaminant concentration contour lines for all contaminants at or above groundwater SCGs.

- **Tables:**

  Tables 8 through 11 - Please include a key which describes any significant table features (e.g - yellow =screened interval). In addition, an interpretation of the

profiling data should be provided within section 5 or 6 of the report. This was not apparent in our review.

Table 12 - Please include a graphical interpretation of this contaminant concentration data for the vicinity, including contaminant concentration contours. Also, the date(s) of sample collection should be specified for each sampling location on both the table and outstanding representative figure. In addition, it should be indicated which of the listed properties have been connected to public water or have well-water treatment systems installed.

The Department looks forward to working with you in addressing these matters to satisfy the requirements of the VCP in regards to investigation at this site. Please submit the revised report document within 30 calendar days of receipt of this letter. If there are any questions regarding the comments or recommendations within this letter I can be reached at (518) 402-9620.

Sincerely,

Christopher G. Alonge, P.E.
DEC DER Project Manager

cc: John Olm - NYS DOH BEEI (by e-mail)
Daniel Miller, Ph.D. - RC DOH (by e-mail)
Kevin Carpenter, P.E. - NYS DEC DER BERA RSB (by e-mail)
Ram Pergadia, P.E. - NYS DEC DER Region 3 (by e-mail)
Michael Lesser, Esq. - NYS DEC Albany (by e-mail)
G. Heitzman/C.Alonge/file

40 British American Boulevard, Latham, New York 12110

January 29, 2003 *HAND DELIVERED*

Christopher G. Alonge, P.E., Project Manager
NYSDEC
Division of Environmental Remediation, Bureau of Eastern Remedial Action, 11th Floor
625 Broadway
Albany, New York 12233-7015

Subject: **NYSDEC Voluntary Cleanup Program Site#: V-00322-3**
Wilsonart International, Inc. 1 Brenner Drive, Congers, New York
Response to NYS DEC, NYS DOH, and RC DOH Review Comments dated September 23, 2002

Dear Mr. Alonge:

Telephone
518.951.2200
Facsimile
518.951.2300

Pursuant to the requirements of the Voluntary Agreement for the above-referenced project, enclosed are all the responses to review comments from the NYS DEC, NYS DOH, and RC DOH of the DRAFT Subsurface Investigation Report dated April 2002. This document serves as an update to an e-mail sent to you on Wednesday December 11, 2002. The comments and Wilsonart International, Inc.'s response to these comments are provided below.

Comment No. 1: RE: Section 1.1 – Project Understanding, Page 1 (Volume 1 of 2)

NYS DEC, NYS DOH, and RC DOH: A copy of the referenced supplemental work plan should be included within the appendices and referenced within this section as a modification to the initially-approved work plan. Also, the report indicates in this section that a copy of the work plan comment correspondence was included within Appendix A, however this documentation was not apparent. Please modify the appendices accordingly.

Wilsonart International, Inc. (Wilsonart) Response: A copy of the referenced Supplemental Work Plan and comment correspondence has been added to Appendix A, which has been revised to read "Appendix A Work Plan, Supplemental Work Plan, and Associated Correspondence". The text within Section 1.1 has been revised to demonstrate that the Supplemental Work Plan represents a modification to the initially approved Work Plan. The above-noted changes (text and Appendix A) are provided in Attachment A.

Comment No. 2: RE: Section 2.10 – Investigative-Derived Waste Management, Page 15 (Volume 1 of 2)

NYS DEC, NYS DOH, and RC DOH: A summary of the waste characterization results should be included here along with final disposition of all investigative-derived waste (IDW). An accounting of all waste containers generated on-site should also be included in this section. In addition, copies of waste manifests should be included in the report for IDW transported from the site.

Wilsonart Response: Based on Earth Tech's recent visit to the site for consolidation and disposal coordination, there were 10 non-hazardous drums of mixed waste (primarily drilling return waters, purge/development water, and sediment) to dispose of in accordance with all applicable regulations and standards. While at the site during the consolidation and verification of the contents of the drums, Earth Tech observed the bottom of one purge water drum to be slightly bulged. The distortion in the drum was most likely a result of the contents freezing. The contents of the drum were removed and placed into other drums containing purge water. The bulged drum was inspected upon removing the contents in order to verify the integrity of the drum and ensure no purge water was released. A total of 9 drums of IDW were removed from the site. Based upon historical soil quality results and groundwater quality results, all containerized IDW is characterized as a non-hazardous waste and was labeled, transported, and disposed of as a non-hazardous, non-RCRA, and non-DOT regulated waste. All the drums were appropriately labeled, contents verified, and staged for removal from the Property. Earth Tech, on behalf of Wilsonart, manifested and characterized the on-site drums (using historical analytical data), coordinated with the transporter (St. Joseph Motor Lines US EPA I.D.#: PAD 987358587) and designated disposal Facility (Chemtron Corporation, US EPA I.D.#: OHD066060609), and finalized paperwork for disposal. Earth Tech contacted its disposal subcontractor (Corbett Management Services, LLC of Manlius, New York) and the drums were removed from the Property on Monday December 16, 2002. Earth Tech, serving as an agent for Wilsonart requested cradle-to-grave documentation for the drums to verify the final disposal location. The drums were disposed of at a permitted Facility in Avon, Ohio. The manifest is provided in Attachment B.

Comment No. 3: RE: Section 4.2.2 – Site Bedrock Geology, Page 23 (Volume 1 of 2)

NYS DEC, NYS DOH, and RC DOH: MW-7 is listed as having the maximum bedrock drilling depth at 45'bgs. However, the remainder of this report indicates that MW-8 is actually the deepest bedrock well at 45'bgs, while MW-7 was drilled to 41'bgs. Please resolve this conflict in information.

Wilsonart Response: The deepest well at the Site is monitoring well MW-8. The depth, as indicated on Tables 2 and 3 and Appendix D (Core Logs and Well Construction Forms) for wells MW-7 and MW-8 are 41 feet below ground surface (BGS) and 45 feet BGS, respectively. The first paragraph of Section 4.2.2 has been revised and reads as follows:

During the primary stage of the SI, bedrock was encountered at a maximum drilling depth of 45 feet below surface grade (~~MW-7~~ MW-8). The deepest bedrock elevation encountered is at bedrock monitoring well MW-9 (137.68 feet), which is located along the mid-western portion of

the Site. Bedrock outcrops are not present on site, but due to the relatively thin blanket of glacial soils, bedrock outcrops are intermittently located throughout the study area.

Comment No. 4: RE: Section 5.2.5 – Groundwater Flow Velocity and Travel Time, Page 27 (Volume 1 of 2)

NYS DEC, NYS DOH, and RC DOH: Two different flow velocities are used to calculate the travel time from MW-8 to MW-9 and MW-8 to MW-3. Please indicate which flow velocity is more accurate of actual groundwater conditions at the Site and provide a basis for the interpretation, as the range in values appears to be substantial.

Wilsonart Response: It is Earth Tech's professional opinion that the flow path between on-site wells MW-8 to MW-9 best reflects bedrock groundwater flow patterns at the Site. This flow path was selected because it is the longest flow path and best reflects hydrogeologic properties of the Site. The observed range in values between other Site flow paths, such as from MW-8 to MW-3, is likely a function of variability in transmissivity and reflects a complex inter-relationship between Site development and geologic setting and its impact to recharge contributions and discharge at the Site. The above-noted changes (text) are provided in Attachment C.

Comment No. 5: RE: Section 7.3.2 –Page 35 (Volume 1 of 2)

NYS DEC, NYS DOH, and RC DOH: The second sentence does not indicate the distance that Toms Brook is from the Site. This section should simply indicate that the suspected exposure pathways associated with surface water and sediment can be eliminated based on site characterization information that shows these media are not contaminated. As such, it would not be necessary to further define the pathway (i.e., there would be no need to discuss exposure frequency or populations).

Wilsonart Response: Toms Brook is approximately 0.7 mile to the north-northwest of the Site. Additional comments noted above have been incorporated into the revisions for Section 7.3.2, which is provided in Attachment D.

Comment No. 6: RE: Section 7.3.3 – Page 36 (Volume 1 of 2)

NYS DEC, NYS DOH, and RC DOH: The next to last sentence in the second paragraph incorrectly states that the RCDOH "mandated" the discontinuance of private wells downgradient of the site which were contaminated with TCE, PCE or Freon-1134 at concentrations exceeding standards for public drinking water supplies. The RCDOH did not "mandate" that homes stop using their contaminated water supply wells. They did, however, notify all affected residents that their water had contaminants at concentrations exceeding MCLs, and recommended that they discontinue use of the water. RCDOH also distributed bottled water (supplied by Wilsonart) to those residents until they could establish a connection to public water. To RCDOH's knowledge, all homes that were identified as having water with contaminants exceeding MCLs have been connected to the public water supply.

Also, Restaurant X, which is not hooked to public water supply, had concentrations very close to the MCL, but has installed a treatment system as a temporary measure. Negotiations are also underway between the town of Clarkstown and the local water company to get the water main extended up 303 to serve Restaurant X and other residents in the area.

NYS DOH does not agree with the conclusion that the future construction/utility worker scenario represents a completed exposure pathway. This is based on the fact that subgrade utilities are generally not installed into the groundwater table. It is unlikely that future construction activities would purposely involve excavating to depths below the groundwater table, and workers would be using personal protective equipment in accordance with health and safety protocols.

Wilsonart Response: Section 7.3.3 has been revised to incorporate concerns or comments raised by the NYS DOH and RC DOH. The revised edition of Section 7.3.3 is provided in Attachment E.

Comment No. 7: RE: Section 7.3.4 – Page 37 (Volume 1 of 2)

NYS DEC, NYS DOH, and RC DOH: According to NYS DOH, this section should simply indicate that the suspected exposure pathways associated with contaminated soil and its potential affects on ambient air quality can be eliminated. This conclusion is based on factors involving the sources and transport/migration of contamination (i.e., the groundwater contamination is at appreciable depth and there is a significant dilution effect encountered once VOCs in soil gas are released into the atmosphere).

Wilsonart Response: Section 7.3.4 has been revised to incorporate concerns or comments raised by the NYS DOH. The revised edition of Section 7.3.4 is provided in

Christopher G. Alonge, P.E.
NYS DEC DER BERA
January 29, 2003

Attachment F.

Comment No. 8: RE: Section 7.3.5 – Page 37 (Volume 1 of 2)

NYS DEC, NYS DOH, and RC DOH: As no soil or groundwater samples were collected from beneath the former Wilsonart building, the potential for impacts to air quality within the building from the intrusion of contaminated soil gas cannot be supported by the available data. However, NYS DOH considers the potential for impacts to indoor air quality on and off-site very remote given the total concentrations of VOCs detected in on-site groundwater within shallow bedrock are less than one part per million (i.e., the levels detected would present marginal impacts to the surrounding gas medium). In addition, the local geology is not conducive to soil gas transport/migration, and the on-site building does not possess a basement. Therefore, NYS DOH has agreed to basically rule out any suspected or possible exposure pathways involving contaminated soil gas at the site building.

Wilsonart Response: Section 7.3.5 has been revised to incorporate comments raised by the NYS DOH. The revised edition of Section 7.3.5 is provided in Attachment G.

Comment No. 9: RE: Section 7.4.3 – Page 38 (Volume 1 of 2)

NYS DEC, NYS DOH, and RC DOH: There are additional residences served by private water supply wells that had detections of Freon and/or TCE at concentrations below the MCL. Until the source is located and remediated, the contaminant plume will likely continue to migrate southward, eventually impacting additional private wells. Concentrations in some wells that are still in use could rise above the MCL.

Wilsonart Response: Section 7.4.3 has been revised to incorporate Comment #9. The revised edition of Section 7.4.3 is provided in Attachment H for your review.

Comment No. 10: RE: Section 8.1 – Page 41 (Volume 1 of 2)

NYS DEC, NYS DOH, and RC DOH: It is indicated that "the horizontal groundwater flow rate in the upper bedrock zone is estimated to be between 0.75 and 1.8 feet per year". Please revise this statement to be consistent with outstanding revisions to Section 5.2.5.

Wilsonart Response: The 7th bullet for Section 8.1 has been revised to be consistent with changes made to address Comment #4. The horizontal groundwater flow rate in the upper bedrock zone is estimated to be approximately 1.8 feet per year (Attachment I).

Comment No. 11: RE: Regarding the DUSRs (Volume 2 of 2)

NYS DEC, NYS DOH, and RC DOH: ***A)*** The comments and data qualifiers contained within the DUSRs are appropriate as described. However, the Summary Data Packages have not been updated/edited to include the data qualifiers described in the DUSRs.

Wilsonart Response: The Laboratory Analytical Reports for the soil samples (October 2000 Sampling Event) and groundwater samples (November 17, 2000 Sampling Event and March 31, 2001 Sampling Event) have been revised to incorporate Comment #11a. The updated/edited Summary Data Packages will be provided in Appendices F, G, and H, respectively.

NYS DEC, NYS DOH, and RC DOH: B) The Organic Data Usability Summary Report for SDG # MW-1(2) is incomplete. There are no dates or signatures of preparation or review.

Wilsonart Response: A complete version of the revised Organic DUSR for SDG # MW-1(2) is provided in Attachment J. Please note that the revised Organic DUSR for SDG # MW-1(2) will be provided in the front portion of Appendix H, entitled "Laboratory Analytical Reports & DUSR – March 30, 2001 Groundwater Results".

NYS DEC, NYS DOH, and RC DOH: ***C)*** Additionally, it should be noted that page 2 of 2 of the Organic Data Usability Summary Report for SDG # MW-1 is missing the date signed by the preparer.

Wilsonart Response: A complete version of the revised Organic DUSR for SDG # MW-1 is provided in Attachment K. Please note that the revised Organic DUSR for SDG # MW-1 will be provided in the front portion of Appendix G, entitled "Laboratory Analytical Reports & DUSR – November 17, 2000 Groundwater Results".

Comment No. 12: RE: Figures (Volume 1 of 2)

NYS DEC, NYS DOH, and RC DOH: Figures 12 & 13 – Please revise figure to include property boundaries and also to include contaminant concentration contour lines for all contaminants at or above groundwater SCGs.

Wilsonart Response: The property boundary was inserted into Figures 2 through 5 and Figures 7 through 13 (Attachment L). Per agreement with NYS DEC Project Manager Christopher G. Alonge, P.E., mapping of FREON-113 and TCE concentrations from the March 30/31, 2001 groundwater sampling event was performed by Earth Tech. Figures 14 and 15 provide a depiction of concentration contours for FREON-113 and TCE, respectively. In order to add clarity to these maps, the top of bedrock surface (taken from Figure 5) and groundwater flow direction for March 2001 (taken from Figure 11) were also inserted into these drawings. Additional discussion was also provided in Sections 6.2.2 (Groundwater Analytical Results). The new figures and additional text are provided in Attachment M for your review.

Comment No. 13: RE: Tables (Volume 1 of 2)

NYS DEC, NYS DOH, and RC DOH: Tables 8 through 11 – Please include a key which describes any significant table features (e.g. - yellow = screened interval). In addition, an interpretation of the profiling data should be provided within section 5 or 6 of the report. This was not apparent in our review.

Wilsonart Response: The revised tables and additional text are provided in Attachment N for your review. Interpretation of the profiling data, which was conducted on March 23, 2001, was inserted at the base of each table and will be briefly overviewed in Section 6.2.2, Groundwater Analytical Results, of the FINAL SI Report.

Comment No. 14: RE: Table 12 (Volume 1 of 2)

NYS DEC, NYS DOH, and RC DOH: Table 12 – Please include a graphical interpretation of this contamination concentration data for the vicinity, including contamination contours. Also, the date(s) of sample collection should be specified for each sampling location on both the table and outstanding representative figure. In addition, it should be indicated which of the listed properties have been connected to public water or have well-water treatment systems installed.

Wilsonart Response: Results from the RCDOH sampling indicate the affected area has migrated approximately ¼-mile southeast of the Site. Mapping of the primary contamination contours (Freon-113 and TCE) could not be performed due to the limitations of the analytical data (i.e., different sampling dates and variability in the well construction depth of affected water supply wells). It is Earth Tech's opinion that contouring this data may mislead the reader RE:

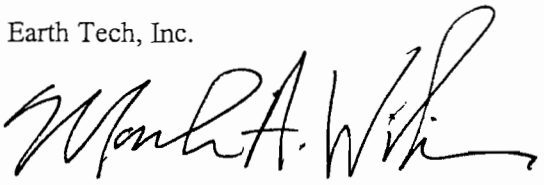
contaminant transport from a local or regional perspective. The revised table and additional/revised text are provided in Attachment O for your review.

Christopher G. Alonge, P.E.
NYS DEC DER BERA
January 29, 2003

If Earth Tech's response, on behalf of Wilsonart International, Inc., is deemed satisfactory then efforts will be made to embed the respective information into the FINAL Subsurface Investigation Report. If you have any questions, please contact me at (518) 951-2368 or via e-mail at MARK.A.WILLIAMS@earthtech.com.

Very truly yours,

Earth Tech, Inc.



Mark A. Williams, P.G.
Project Manager

Attachments

C: Paul Maxwell – Wilsonart International
John Olm – NYS DOH BEEI (by e-mail)
Daniel Miller, Ph.D. – RC DOH (by e-mail)
Kevin Carpenter, P.E. – NYS DEC DER BERA RSB (by e-mail)
Ram Pergadia, P.E. – NYS DEC DER Region 3 (by e-mail)
Michael Lesser, Esq. – NYS DEE Albany (by e-mail)

ATTACHMENTS

ATTACHMENT A

WILSONART RESPONSE TO COMMENT NO. 1: RE: SECTION 1.1 – PROJECT UNDERSTANDING, PAGE 1
(VOLUME 1 OF 2)

Attachment A

Comment No. 1: RE: Section 1.1 – Project Understanding, Page 1 (Volume 1 of 2)

Revised Text for Section 1.1

The NYS DEC had raised a concern regarding the presence of volatile organic compounds (VOCs) detected in groundwater on the property, and has requested an additional investigation to identify if Wilsonart is the source for this contamination. The SI was subdivided into two stages: a primary stage, which was conducted in fall 2000 and winter 2000/2001; and a supplemental stage, which was conducted during spring 2001. The Supplemental Work Plan represents a modification to the initially-approved Work Plan.

The SI (primary stage and supplemental stage) was developed to provide data to address the NYS DEC's concerns, which were summarized by Mr. Dale A. Desnoyers (NYS DEC Chief, State Superfund and Voluntary Cleanup Bureau) in a January 12, 2000 letter to Mr. Ronald S. Pordy (Lester, Schwab, Katz & Dwyer, LLP of New York, N.Y.). The purpose of the SI was to compile and develop factual information to address Wilsonart's contention that the trichloroethene (TCE) impacted groundwater detected on site is the result of an off-site source(s) unrelated to Wilsonart's past use of the property. This report provides for the investigation of soil and groundwater quality to determine the source of groundwater impacts, define limits of potential soil and groundwater impacts, and further characterize groundwater flow conditions.

The SI (primary stage) was conducted in accordance with the document entitled Subsurface Investigation Work Plan (Earth Tech, Revised August 2000), and three letters from Earth Tech to NYS DEC. An August 17, 2000 letter provided an initial response to June 29, 2000 comments from the NYS DEC, New York State Department of Health (NYS DOH), and Rockland County Department of Health (RC DOH) on the May 2000 DRAFT Work Plan. The letter dated August 17, 2000 transmitted the FINAL Work Plan to the NYS DEC, NYS DOH, and RC DOH. Additional comments from the NYS DEC, NYS DOH, and RC DOH were attached to the revised SI Work Plan. A copy of the amended SI Work Plan and the other correspondences listed above are provided in Appendix A.

A status report prepared by Wilsonart was submitted to the NYS DEC, NYS DOH, and RC DOH on February 2, 2001. The Status report provided data and findings from key elements of the primary stage of the SI. Wilsonart concluded that an off-site upgradient source was migrating to the 1 Brenner Drive property via bedrock groundwater. Although the NYS DEC did acknowledge the previous round of groundwater analytical data proved an off-site upgradient source was a contributing component to the groundwater impacted at the Site, the NYS DEC raised concerns that on-site well MW-3 exhibited twice the concentration of TCE and 1,1,1-TCA then observed at upgradient well MW-8 (NYS DEC, February 23, 2001). Although agreeing with the majority of the information represented within Wilsonart's February 2, 2001 letter, the NYS DEC concluded a release could not be granted until this issue was addressed.

On March 20, 2001, Wilsonart committed to and outlined additional activities that would be performed during the supplemental stage of investigation to address data gaps or provide additional understanding of conditions at the Project site. A March 21, 2001 NYS DEC response indicated the Department conceptually agreed with the majority of the expanded investigation tasks and pledged to review the supplemental investigative data. Wilsonart submitted the Supplemental Work Plan to the NYS DEC on April 2, 2001. The Supplemental Work Plan

represents a modification to the initially-approved Work Plan. A copy of the Supplemental Work Plan and the other correspondences listed above are also provided in Appendix A. The NYS DEC indicated if Wilsonart's conclusion (i.e., observed groundwater contamination is most likely related to an off-site upgradient source) proved to be true, then efforts would be initiated toward the issuance of a release from liability.

ATTACHMENT B

WILSONART RESPONSE TO COMMENT NO. 2: RE: SECTION 2.10 – INVESTIGATIVE-DERIVED WASTE MANAGEMENT, PAGE 15 (VOLUME 1 OF 2)

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: N/A
Manifest Document No.:
2. Page 1 of 1

GENERATOR

3. Generator's Name and Mailing Address
Wilsonart International, Inc. c/o Earth Tech
40 British American Blvd., Latham, NY 12110
4. Generator's Phone (518)951-2200 Attn: Will Lindheimer

SITE:
1 Brenner Dr.
Congers, NY 10920

5. Transporter 1 Company Name: St. Joseph Motor Lines
6. US EPA ID Number: PAD987358587
A. Transporter's Phone: (800) 221-2564

7. Transporter 2 Company Name:
8. US EPA ID Number:
B. Transporter's Phone:

9. Designated Facility Name and Site Address
Chemtron Corporation
35850 Schneider Ct.
Avon, OH 44011-1232
10. US EPA ID Number: OHD066060609
C. Facility's Phone: (800) 676-5091

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non RCRA, Non DOT Regulated Material (Waste Water) V20021223A18-A	8	D.M	EST. 440	G
b. Non RCRA, Non DOT Regulated Material (Soil & Debris) V20021223A19-A	1	D M	EST. 300	P
c. Non RCRA, Non DOT Regulated Material (Waste Water & Soil)	—	D M	EST. —	P
d.				

D. Additional Descriptions for Materials Listed Above
11a. Approval #Q20021204A29
11b. Approval #Q20021204A31
11c. Approval #Q20021204A30

E. Handling Codes for Wastes Listed Above
L

15. Special Handling Instructions and Additional Information

Emergency Contact: CMS (866) 734-2553
Schedule #CT5102

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: William Lindheimer
Signature: William F Lindheimer
Month 12 Day 16 Year 02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: LARRY T. Martin
Signature:
Month 12 Day 16 Year 02

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name:
Signature:
Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Karl A. Guenther
Signature: Karl A. Guenther
Month 12 Day 23 Year 02

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

ORIGINAL – RETURN TO GENERATOR

12-BLS-C6 Rev.

ATTACHMENT C

WILSONART RESPONSE TO COMMENT NO. 4: RE: SECTION 5.2.5 – GROUNDWATER FLOW VELOCITY AND TRAVEL TIME, PAGE 27 (VOLUME 1 OF 2)

5.2.5 Groundwater Flow Velocity and Travel Time

The horizontal groundwater flow velocity within the upper bedrock groundwater flow zone at the Site was estimated to determine the travel time downgradient of monitoring well MW-8. Groundwater velocity in this area was calculated using a modification of the Darcy Equation, where groundwater flow velocity is a function of the aquifer's hydraulic conductivity, effective porosity, and hydraulic gradient as follows:

$V = ((K(h/L))/n$ where: V = groundwater flow velocity
K = hydraulic conductivity
n = effective porosity
h/L = hydraulic gradient

The groundwater flow velocity calculations were performed utilizing a hydraulic gradient (0.025) derived from groundwater elevations recorded at the Site, the geometric mean hydraulic conductivity values obtained from wells MW-6, MW-7, MW-8, and MW-9 (3.40 feet/day), and an effective porosity value of 15%. Utilizing these values, the resultant groundwater flow velocities are summarized as follows:

HYDRAULIC CONDUCTIVITY (FT/DAY)	GROUNDWATER FLOW VELOCITY (FT/DAY)
3.40	**0.57**

Groundwater flow paths along which groundwater travel time was calculated between MW-8 to MW-9. The travel time along this selected flow path is calculated as the length of the flow path (L) divided by the groundwater flow velocity (V).

Groundwater flow in the upper bedrock flow zone at the Site is assumed to occur primarily in a horizontal dimension, in a west-southwesterly direction beneath the Site on March 30, 2001. Utilizing the two groundwater flow velocities summarized above, the travel time along the groundwater flow path from MW-8 to MW-9 (L= 375 feet) is estimated as 1.8 years. This estimate represents the water flow itself and not necessarily the migration of solutes, which may be diluted, biodegraded, retarded, and subject to other fate and transport processes.

ATTACHMENT D

WILSONART RESPONSE TO COMMENT NO. 5: RE: SECTION 7.3.2 –PAGE 35 (VOLUME 1 OF 2)

ATTACHMENT D (REVISIONS TO SECTION 7.3.2)

7.3.2 Potential Surface Water and Sediment Receptors/Exposure Pathways

No surface water was observed on Site. Since subsurface soils and shallow overburden groundwater did not indicate the presence of VOCs it is expected that any discharge to ditches that feed Toms Brook, located approximately 0.7 mile to the north-northwest of the Site would not represent a pathway to contaminate surface water and sediment. The suspected exposure pathways associated with surface water and sediment can be eliminated based on site characterization information that shows these media are not contaminated. As such, it is not necessary to further define the pathway (i.e., there would be no need to discuss exposure frequency or receptor populations).

ATTACHMENT E

WILSONART RESPONSE TO COMMENT NO. 6: RE: SECTION 7.3.3 – PAGE 36 (VOLUME 1 OF 2)

ATTACHMENT E (REVISIONS TO SECTION 7.3.3, PAGE 36)

7.3.3 Potential Groundwater Receptors/Exposure Pathways

The geologic units present at the Site (Section 4.2) comprise three hydrogeologic units. Two of these include a shallow unconsolidated sediments (overburden) groundwater flow zone and an upper bedrock groundwater flow zone. The third hydrogeologic unit is comprised of glacial till. This unit likely serves as a semi-confining layer to vertical groundwater flow between the two groundwater flow zones. Groundwater in the shallow overburden beneath the Site, which is not impacted, flows to the west toward a ditch. Impacted groundwater in the upper bedrock flows locally in a radial manner to the west and/or southwest until it is captured by the dominant north to south flow patterns in the region.

The presence of these contaminants indicate that the impacted area is much larger than the Wilsonart Site. The RC DOH identified several private water wells (bedrock) to the south, and downgradient, of the Site that contained TCE, Freon-113, Freon-11, 1,1,1-TCA, PCE, and MTBE. Freon-11, PCE, and MTBE were not detected in groundwater samples collected from on-site bedrock wells. Several of the residents along Wells Avenue, Sheridan Avenue, Southward Street, and Burnside Avenue were not hooked up to the local public water supply system (United Water Company) and revealed levels of Freon-113 and occasionally TCE and PCE that were found to exceed Maximum Contaminant Levels (MCLs), which represents the highest level of a contaminant that is allowed in drinking water. RC DOH immediately notified all affected residents that their water had contaminants at concentrations exceeding MCLs, and recommended that they discontinue use of the water. RC DOH distributed bottled water (supplied by Wilsonart International, Inc.) to those residents until they could establish a connection to public water. To RC DOH's knowledge, all homes that were identified as having water with contaminants exceeding MCLs have been connected to the public water supply.

In addition, Restaurant X, which is not hooked up to the local public water supply system, and had concentrations very close to the MCL, but has installed a treatment system as a temporary measure. Negotiations are also underway between the town of Clarkstown and the local water company to get the water main extended up 303 to serve Restaurant X and other residents in the area.

Although considered highly unlikely because of the availability of a public water supply, the potential exists for individuals to install a private bedrock well on the Site in the future. Although such a well would likely be installed deeper in bedrock, less likely to be impacted by drought conditions or surficial contamination, it has been conservatively assumed that such a well could be installed. Therefore, potential on-site future residents or future workers may be exposed to impacted well water during drinking and/or general uses (resulting from dermal contact and inhalation of volatiles).

Since the depth to groundwater ranges from approximately 0 feet to 27 feet below grade and all monitoring wells are locked/bolted closed to prevent unauthorized access, the most likely potential human receptors who may come in direct contact (incidental ingestion and dermal contact) with shallow groundwater beneath the Site are environmental professionals and contractors conducting work at the Site. However, exposures of environmental professionals and contractors to groundwater are/will be precluded by the use of personal protective equipment as necessary in accordance with site-specific health and safety plans.

Since depth to bedrock is fairly shallow in parts of the Site (approximately 0 to 25 feet below grade), it is possible that water-bearing zones in the upper bedrock may be encountered during future subsurface excavation activities at the Site.

Potential direct contact with groundwater by future construction/utility worker scenario does not represent a completed exposure pathway. This is based on the fact that sub-grade utilities are generally not installed into the groundwater table. It is unlikely that future construction activities would purposely involve excavating to depths below the groundwater table, and workers would be using personal protective equipment in accordance with health and safety protocols.

* = Highlighted section of text reflects revisions to DRAFT Subsurface Investigation Report

ATTACHMENT F

WILSONART RESPONSE TO COMMENT NO. 7: RE: SECTION 7.3.4 – PAGE 37 (VOLUME 1 OF 2)

ATTACHMENT F (REVISIONS TO SECTION 7.3.4, PAGE 37)

7.3.4 Potential Ambient Air Receptors/Exposure Pathways

The suspected exposure pathways associated with contaminated soil and its potential affects on ambient air quality can be eliminated. This conclusion is based on factors involving the sources and transport/migration of contamination (i.e., the groundwater contamination is at appreciable depth and there is a significant dilution effect encountered once VOCs in soil gas are released into the atmosphere).

* = Highlighted section of text reflects revisions to DRAFT Subsurface Investigation Report

ATTACHMENT G

WILSONART RESPONSE TO COMMENT NO. 8: RE: SECTION 7.3.5 – PAGE 37 (VOLUME 1 OF 2)

Attachment G (Revisions to Section 7.3.5, Page 37)

7.3.5 Potential Indoor Air Receptors/Exposure Pathways

As no soil or groundwater samples were collected from beneath the former Wilsonart building, the potential for impacts to air quality within the Site building from the intrusion of contaminated soil gas cannot be supported by the available data. However, the potential for impacts to indoor air quality on-site are very remote given that the total concentrations of VOCs detected in on-site groundwater (shallow bedrock hydrogeologic unit) are less than one part per million (i.e., the levels detected would present marginal impacts to the surrounding gas medium). In addition, the local geology is not conducive to soil gas transport/migration, and the on-site building does not possess a basement. Therefore, it is suggested that any suspected or possible exposure pathways involving contaminated soil gas at the Site building be eliminated.

* = Highlighted section of text reflects revisions to DRAFT Subsurface Investigation Report

ATTACHMENT H

WILSONART RESPONSE TO COMMENT NO. 9: RE: SECTION 7.4.3 – PAGE 38 (VOLUME 1 OF 2)

Attachment H (Revisions to Section 7.4.3, Page 38)

7.4.3 Groundwater Risk Analysis

As discussed previously in Section 7.3.3, no current potential receptors to contaminated groundwater are present since the Site and surrounding area are serviced by a municipal water supply. Although unlikely, due to the availability of a public water supply, it is possible that a private water supply well could be installed on the Site in the future. Therefore, potential future receptors to contaminated groundwater are considered to include potential future Site residents or site workers who install and utilize private groundwater wells for drinking or other uses. A conservative approach was taken by further assuming that all on-site monitoring wells are considered in this Qualitative Baseline Human Health Risk Assessment to be potential future human exposure points.

As discussed in Section 6 and presented in Tables 6 and 7, groundwater sampling conducted during the SI indicates that the VOCs that were detected above groundwater standards included freon-113 (wells MW-1, MW-2, MW-3, MW-5, MW-6, MW-7, and MW-8), TCE (wells MW-1, MW-2, MW-3, MW-5, MW-6, MW-7, and MW-8), and 1,1,1-TCA (wells MW-3, MW-8, and MW-9). As a result, future ingestion and use of groundwater may result in an unacceptable risk to future Site residents and workers due to the presence of these VOCs if a private water well were installed on-site. It should be mentioned that a municipal water supply is available, making it extremely unlikely that a private water supply well would be installed on the Site.

There are additional residences served by private water supply wells that had detections of Freon and/or TCE at concentrations below the MCL. Until the source is located and remediated, the contaminant plume will likely continue to migrate southward (regional groundwater flow direction), eventually impacting additional private wells. Concentrations in some wells that are still in use could rise above the MCL.

* = Highlighted section of text reflects revisions to DRAFT Subsurface Investigation Report

ATTACHMENT I

WILSONART RESPONSE TO COMMENT NO. 10: RE: SECTION 8.1 – PAGE 41 (VOLUME 1 OF 2)

Attachment I (Revision to Section 8.1, Page 41)

- Groundwater flow direction in the upper bedrock is to the west-southwest across the Site. The average water table gradient across the Site is estimated to be 0.025 ft/ft and the horizontal groundwater flow rate in the upper bedrock zone is estimated to be approximately 1.8 feet per year.

* = Highlighted section of text reflects revisions to DRAFT Subsurface Investigation Report

ATTACHMENT J

WILSONART RESPONSE TO COMMENT NO. 11B: RE: REGARDING THE DUSRS (VOLUME 2 OF 2)

Organic Data Usability Summary Report
Former Wilsonart Facility
Adirondack Environmental Services, New York
SDG # MW-1 (2)

Analytical results for 13 (thirteen) groundwater samples and 1 (one) duplicated sample from the above referenced site were reviewed to evaluate the data quality. Data were assessed in accordance with SW-846 Method 624 (Freon 113 and Tentatively Identified Compounds), Rev. 3 (12/96), the United States Environmental Protection Agency (USEPA) document **USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review** (February 1994), the USEPA Region II document **CLP Organics Data Review and Preliminary Review** (SOP No. HW-6, Revision No. 8, January 1992), where applicable. This validation pertains to the following sample collected by Earth Tech personnel on March 30, 2001 and received at the lab on March 31, 2001.

MW-1(2)	**MW-4(2)**	**MW-8(1)**	**DUP033001**
MW-2(2)	**MW-5(2)**	**MW-8(2)**	
MW-3(1)	**MW-6(2)**	**MW-8(3)**	
MW-3(2)	**MW-7(2)**	**MW-9(2)**	

The following items/criteria applicable to the samples listed above were reviewed:

X Deliverable Requirements
X Case Narrative
X Holding Times and Sample Preparation
X GC/MS Instrument Performance Check
X Initial and Continuing Calibration Data
X Method and Field Blank Summary and Data
X Surrogate Recoveries
X Matrix Spike/Matrix Spike Duplicates
X Matrix Spike Blank
X Internal Standard Areas and Retention Times
X Target Compound Identification/Quantitation
X Quantitation Reports and Mass Spectral Data

This above listed sample was analyzed by method SW846 624, for Volatile Organic Compounds including Freon 113 and TICS. The data have been reviewed according to the above procedures and qualified as described below.

Method 624 – Volatile Organic Compounds:

- The Initial Calibration conducted on 03/30/01 exhibited a percent relative standard deviations (%RSD) greater than 30% between the relative response factors (RRF) of five different standard concentrations for the analyte chloromethane (33%). Per USEPA validation guidelines, compounds exhibiting a %RSD outside of the QC limits are considered estimated in all the sample results. Positive sample results are flagged "J", and non-detect sample results are flagged "UJ".

- The table below lists the continuing calibration compounds that exhibited greater than 25% difference between the initial and continuing calibration responses, and the associated samples. Per USEPA validation guidelines all sample results associated with out-of-control calibration data are considered estimated with positive results flagged "J" and non-detect results flagged "UJ".

Calibration	Compound	%D	Associated Samples
CC: 04/06/01	acetone 2-butanone 2-hexanone 1,1,2,2-tetrachoroethane 1,2-dichloroethene	52.5 60.0 40.6 27.8 28.1	All samples except MW-1(2) and MW-2(2)
CC: 04/07/01	2-butanone 1,1,2,2-tetrachloroethane 1,2-dichloroethene-cis	26.8 28.8 28.8	MW-8(2) DL, MW-8(3)DL, and DUP033001 DL
CC: 04/09/01	chloroethane 2-butanone carbon tetrachloride	26.7 44.4 31.8	MW-1(2), MW-2(2), and MW-8(1) DL

- The table below lists the laboratory method blanks and trip blanks analyzed in association with the listed samples in this data package that exhibited a concentration above the contract required detection limit. Per USEPA validation guidelines, all sample results less than ten times the associated method blank value for common laboratory contaminant compounds (methylene chloride, acetone, 2-butanone) are considered to be laboratory derived and are therefore negated. Any sample result of a non-laboratory contaminant less than five times the associated method blank value are considered to be laboratory derived and are therefore negated.

Method Blank	Compound	Result	Associated Samples
VBLK01	chloroform	2 JJ	All samples except MW-1(2) and MW-2(2)
VBLK02	chloroform	2 J	MW-8(2) DL, MW-8(3)DL, and DUP033001 DL
VBLK03	chloroform	2 J	MW-1(2), MW-2(2), and MW-8(1) DL
TB033001	methylene chloride	4 J	All samples

Summary:

In summary, based on 504 sample data points, 73 of which were qualified as estimated ("J"), and 0 qualified as unusable, and since estimated data are fully compliant and usable, the usability of this data package is 100%.

Minda Kirk — 5/14/01

Prepared By
Minda Kirk
Environmental Scientist

Date

ATTACHMENT K

WILSONART RESPONSE TO COMMENT NO. 11C: RE: REGARDING THE DUSRS (VOLUME 2 OF 2)

Organic Data Usability Summary Report
Congers/Wilsonart
Adirondack Environmental Services Laboratory
Case: ETH 0020
SDG # MW-1

Analytical results for nine (9) groundwater samples and one (1) field duplicate from the above referenced site were reviewed to evaluate the data quality. Data were assessed in accordance with SW-846 Methods 8260, Rev. 3 (12/96), the United States Environmental Protection Agency (USEPA) document **USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review** (February 1994) and the USEPA Region II document **CLP Organics Data Review and Preliminary Review** (SOP No. HW-6, Revision No. 8, January, 1992), where applicable. This validation pertains to the following samples collected by Earth Tech personnel on November 17, 2000:

MW-1	**MW-2**	**MW-3**
MW-4	**MW-5**	**MW-6**
MW-7	**MW-8**	**MW-9**

Field Duplicate : FD111700

The following items/criteria applicable to the samples listed above were reviewed:

X Deliverable Requirements
X Case Narrative
X Holding Times and Sample Preparation
X GC/MS Instrument Performance Check
X Initial and Continuing Calibration Data
X Method and Field Blank Summary and Data
X Surrogate Recoveries
X Matrix Spike/Matrix Spike Duplicates
X Laboratory Control Sample
X Internal Standard Areas and Retention Times
X Target Compound Identification/Quantitation
X Quantitation Reports and Mass Spectral Data

All the above items were in technical compliance with the SW-846 Methods, laboratory QC criteria and USEPA QA criteria

Method 8260 –Volatile Organic Compounds

Summary

In summary, based on 350 sample data points, none of which were qualified as estimated ("J"), and none qualified as unusable, and since estimated data are fully compliant and usable, the usability of this data package is 100%.

Prepared By
Paul D. Wheeler
Environmental Scientist

12/15/00
Date

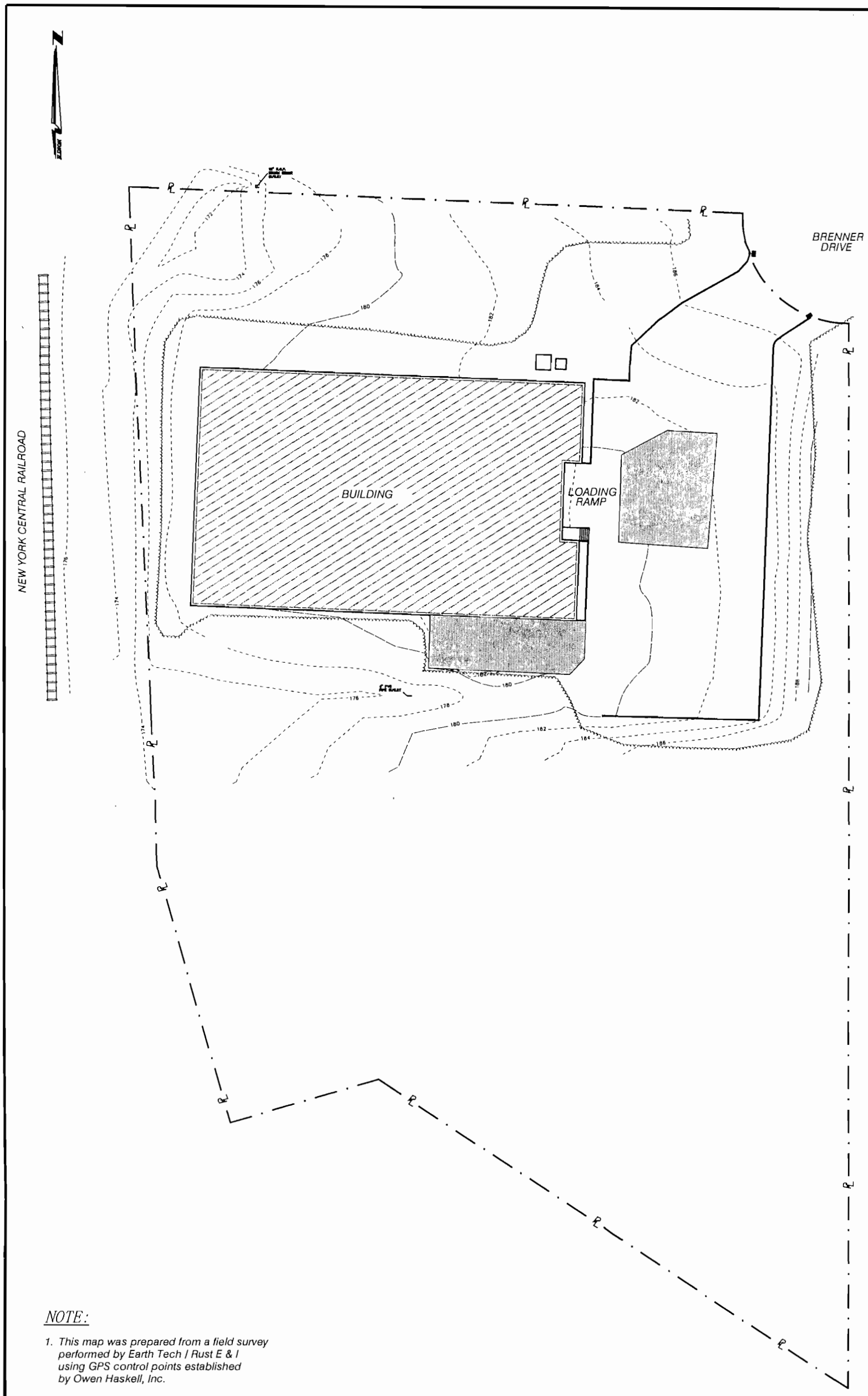
Reviewed By
C. Brett Mongillo
Manager Chemistry & Sampling Services

12.15.00
Date

ATTACHMENT L

WILSONART RESPONSE TO COMMENT NO. 12 (PART I): RE: FIGURES (VOLUME 1 OF 2)

L:\WORK\43015\CADD\Figure-2.dwg PLOT DATE: July 2001



NOTE:

1. This map was prepared from a field survey performed by Earth Tech / Rust E & I using GPS control points established by Owen Haskell, Inc.
2. The horizontal positions are reported in feet; NAD 1983 State Plane of New York East.
3. The elevations are reported in feet; NGVD 1929 vertical datum.
4. Existing ground surface contour interval: 2 feet.
5. Property boundary shown is approximate. Its use is intended for engineering purposes only.

LEGEND

℄ APPROXIMATE PROPERTY BOUNDARY

0 30 60 120

SCALE IN FEET

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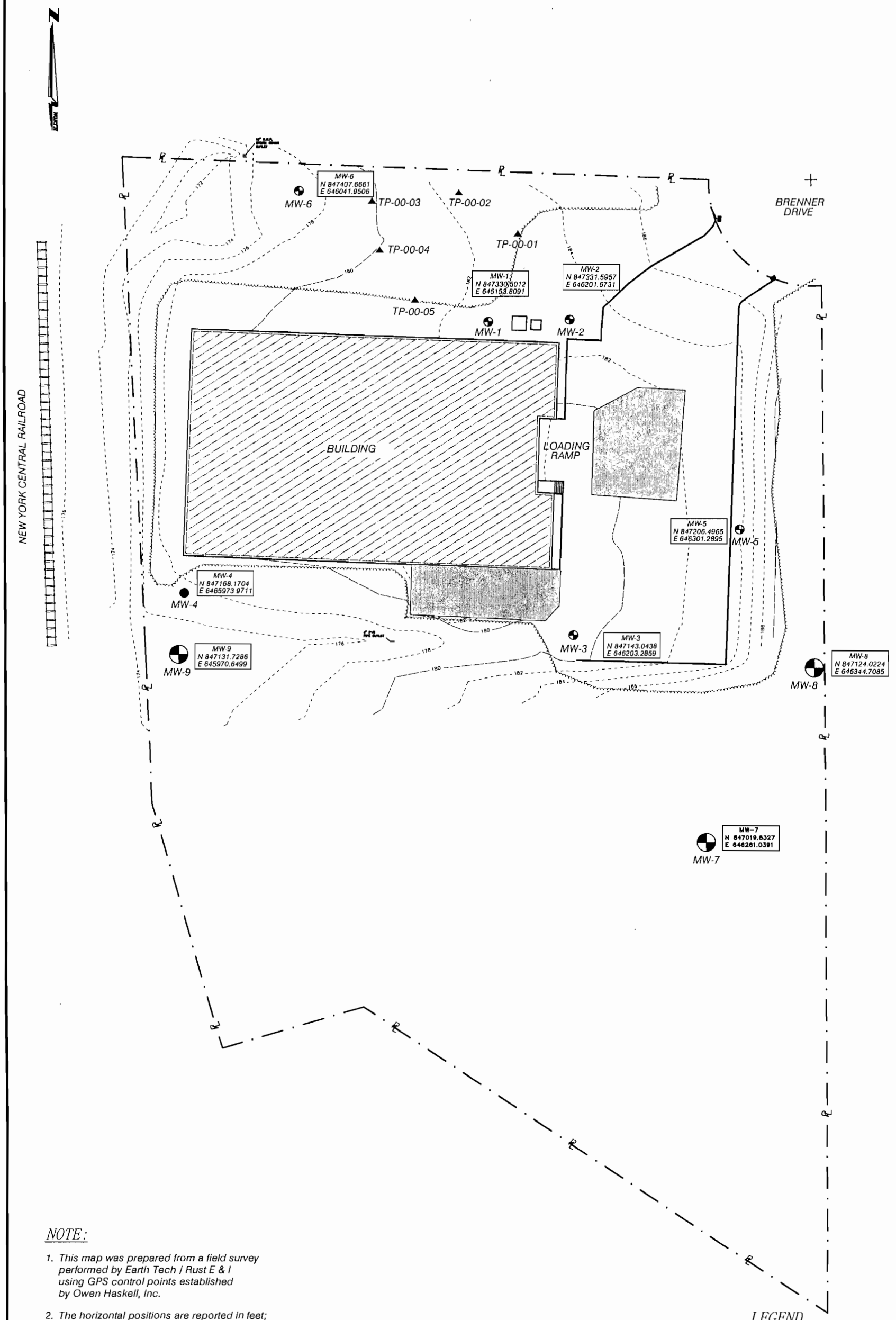
FIGURE 2

SITE MAP

L:\WORK\43015\CADD\Figure-3.dwg PLOT DATE: July 2001



NOTE:

1. This map was prepared from a field survey performed by Earth Tech / Rust E & I using GPS control points established by Owen Haskell, Inc.
2. The horizontal positions are reported in feet; NAD 1983 State Plane of New York East.
3. The elevations are reported in feet; NGVD 1929 vertical datum.
4. Existing ground surface contour interval: 2 feet.
5. Property boundary shown is approximate. Its use is intended for engineering purposes only.

LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- MW-4 — EXISTING OVERBURDEN MONITORING WELL LOCATION (1998)
- MW-1 — EXISTING BEDROCK MONITORING WELL LOCATION (1997 AND 1998)
- MW-7 — BEDROCK MONITORING WELL LOCATION (2000)
- TP-00-03 — TEST PIT LOCATION (2000)

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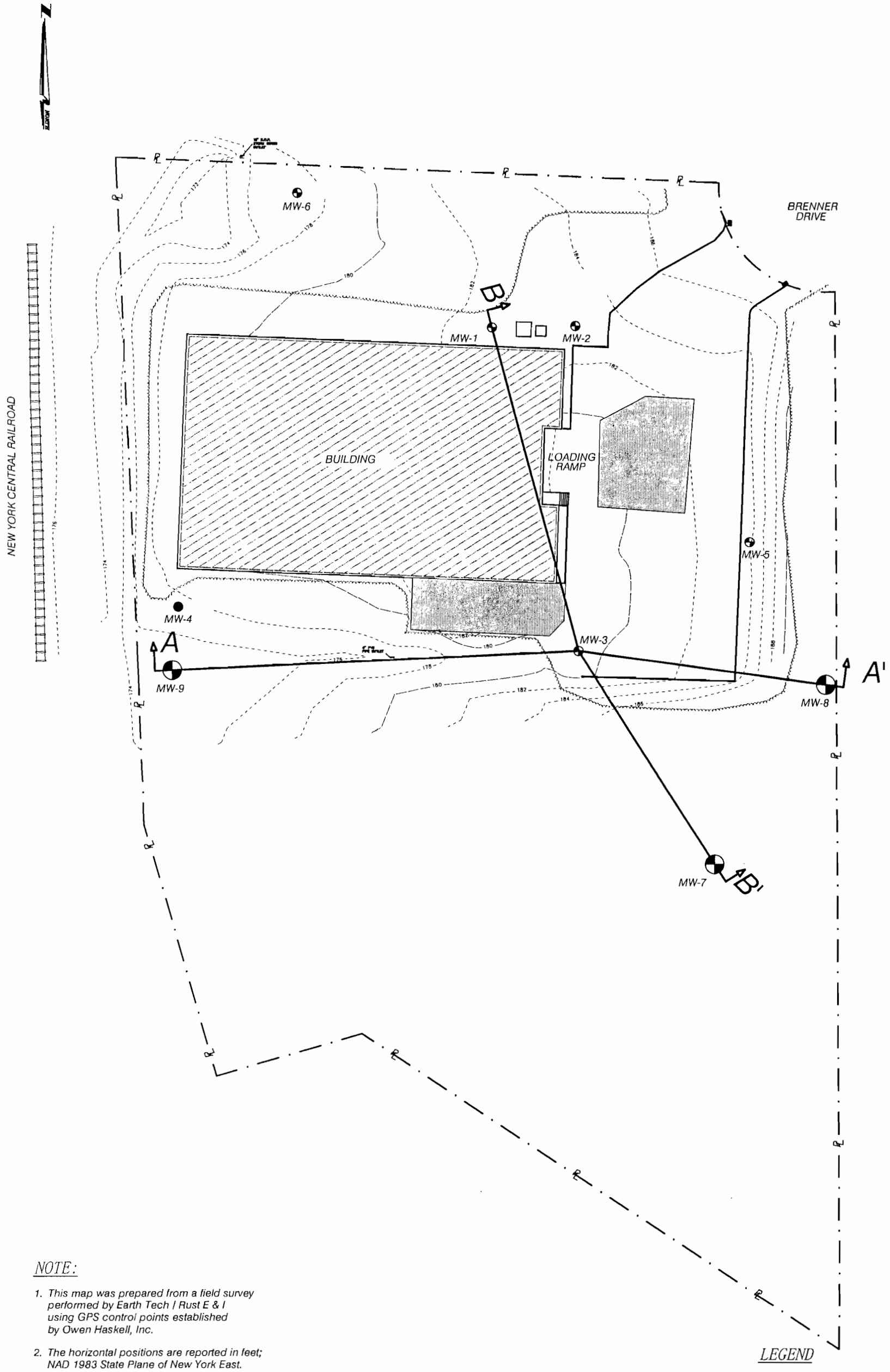
FIGURE 3
SITE MAP

WITH ENVIRONMENTAL MONITORING POINT LOCATIONS

L:\WORK\43015\CADD\Figure-4.dwg PLOT DATE: July 2001



NOTE:

1. This map was prepared from a field survey performed by Earth Tech / Rust E & I using GPS control points established by Owen Haskell, Inc.
2. The horizontal positions are reported in feet; NAD 1983 State Plane of New York East.
3. The elevations are reported in feet; NGVD 1929 vertical datum.
4. Existing ground surface contour interval: 2 feet.
5. Property boundary shown is approximate. Its use is intended for engineering purposes only.

LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- EXISTING OVERBURDEN MONITORING WELL LOCATION (1998)
- EXISTING BEDROCK MONITORING WELL LOCATION (1997 AND 1998)
- BEDROCK MONITORING WELL LOCATION (2000)

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FIGURE 4
SITE MAP

WITH LOCATION OF GEOLOGIC CROSS SECTIONS

L:\WORK\43015\CADD\Figure-5.dwg PLOT DATE: July 2001

NORTH

NEW YORK CENTRAL RAILROAD

BRENNER DRIVE

MW-6
163.20'

TP-00-03
NE

TP-00-02
NE

TP-00-04
NE

TP-00-01
NE

TP-00-05
NE

MW-1
~165'

MW-2
~168'

160'

170'

BUILDING

LOADING RAMP

MW-5
179.76'

MW-4
NE

MW-3
~155'

MW-9
151.68'

MW-8
177.68'

MW-7
178.20'

LEGEND

PL	APPROXIMATE PROPERTY BOUNDARY
MW-4 NE	EXISTING OVERBURDEN MONITORING WELL LOCATION (1998), WITH CORRESPONDING BEDROCK SURFACE ELEVATION
MW-1 ~165'	EXISTING BEDROCK MONITORING WELL LOCATION (1997 AND 1998), WITH CORRESPONDING BEDROCK SURFACE ELEVATION
MW-7 178.20'	BEDROCK MONITORING WELL LOCATION (2000), WITH CORRESPONDING BEDROCK SURFACE ELEVATION
TP-00-03 NE	TEST PIT LOCATION (2000)
NE	NOT ENCOUNTERED
~	APPROXIMATED

0 30 60 120

SCALE IN FEET

NOTE:

1. This map was prepared from a field survey performed by Earth Tech / Rust E & I using GPS control points established by Owen Haskell, Inc.
2. The horizontal positions are reported in feet; NAD 1983 State Plane of New York East.
3. The elevations are reported in feet; NGVD 1929 vertical datum.
4. Existing ground surface contour interval: 2 feet.
5. Property boundary shown is approximate. Its use is intended for engineering purposes only.

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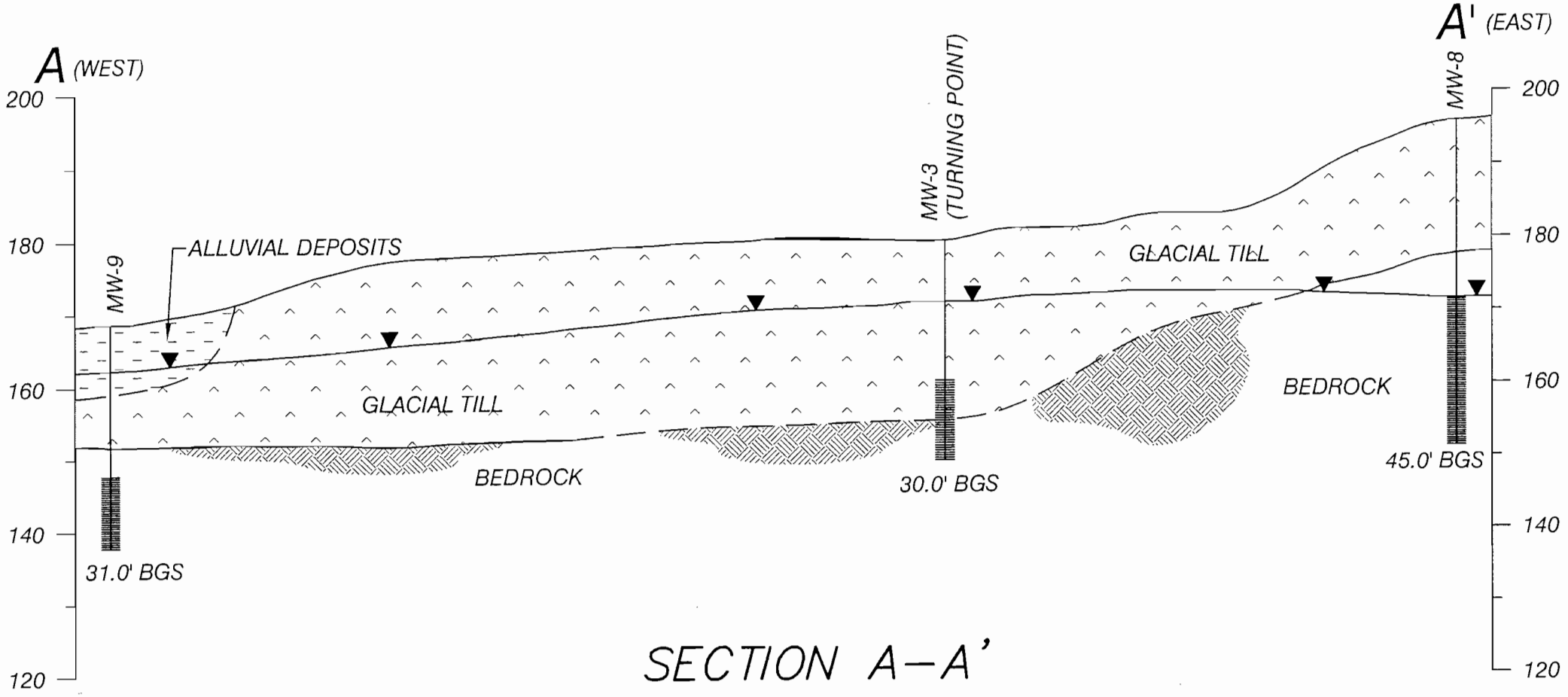
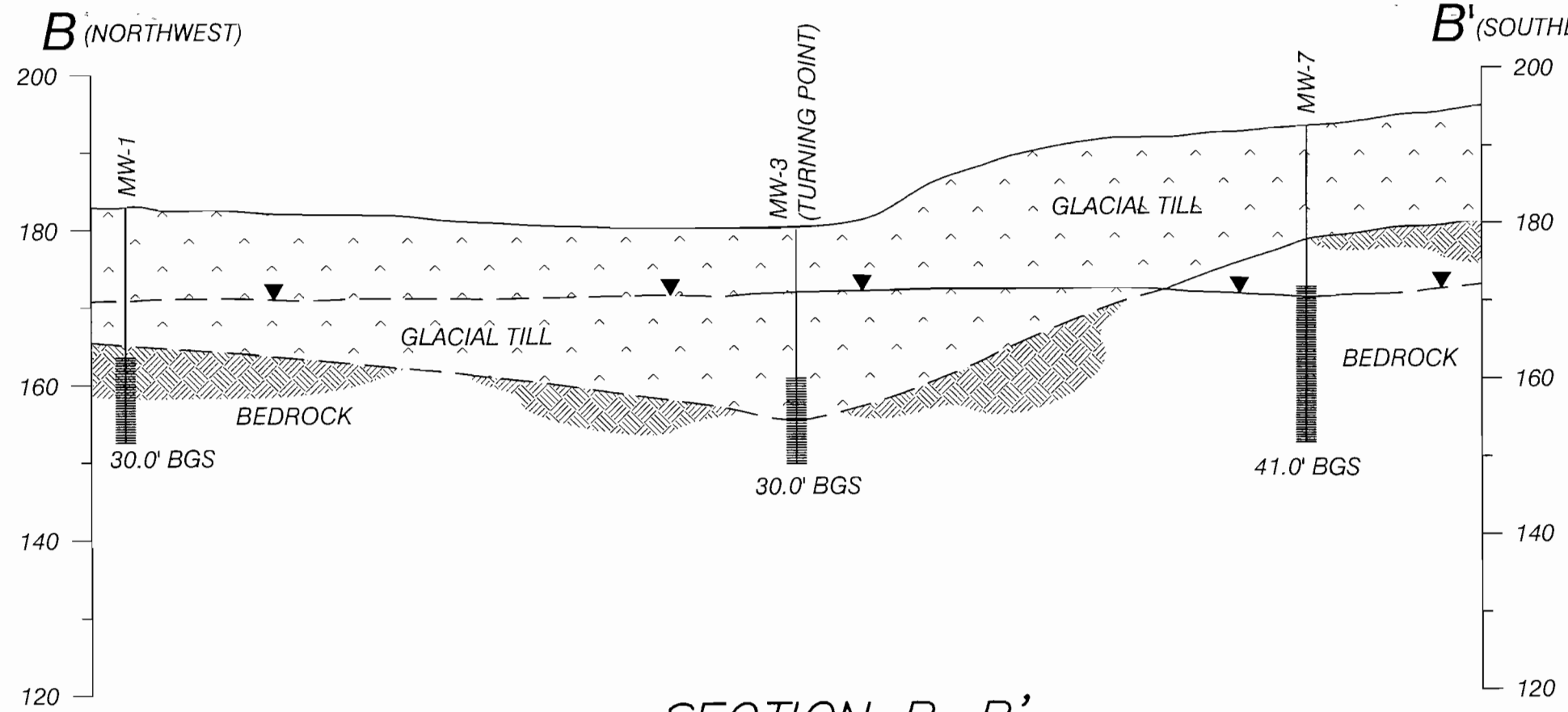
FIGURE 5

BEDROCK SURFACE ELEVATION CONTOUR MAP

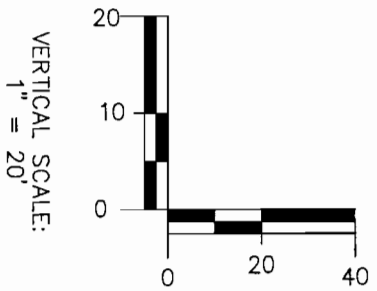


SECTION A–A'



SECTION B–B'

SCALE
(VERTICAL EXAGGERATION: 2x)



LEGEND

ALLUVIAL

RECENT UNCONSOLIDATED SEDIMENTS WHICH HAS BEEN WASHED AWAY AND THROWN DOWN BY RIVERS, FLOODS, AND OTHER CAUSES; CONSISTING OF MODERATELY STIFF CLAY AND SILT TO CLAYEY SILT WITH LITTLE FINE SAND AND AND GRAVEL AT DEPTH.

GLACIAL TILL

GLACIAL TILL, UNSTRATIFIED AND POORLY SORTED DEPOSITS CONSISTING OF A MIXTURE OF CLAY, SILT, SAND, GRAVEL, AND COBBLES / BOULDERS. THE PERMEABILITY IS GENERALLY LOW.

BEDROCK

BRUNSWICK SANDSTONE WITH SILTSTONE: BROWN TO REDDISH BROWN, NEARLY FLAT-LYING, WEAKLY TO MODERATELY CEMENTED. PRIMARY PERMEABILITY IS MODERATE; GROUNDWATER MOVEMENT IS PRIMARILY THROUGH JOINTS AND FRACTURES. GROUNDWATER YIELDS ARE LOW TO MODERATE.

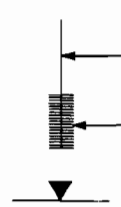


FIGURE 6
GEOLOGIC CROSS SECTIONS
(A–A' and B–B')

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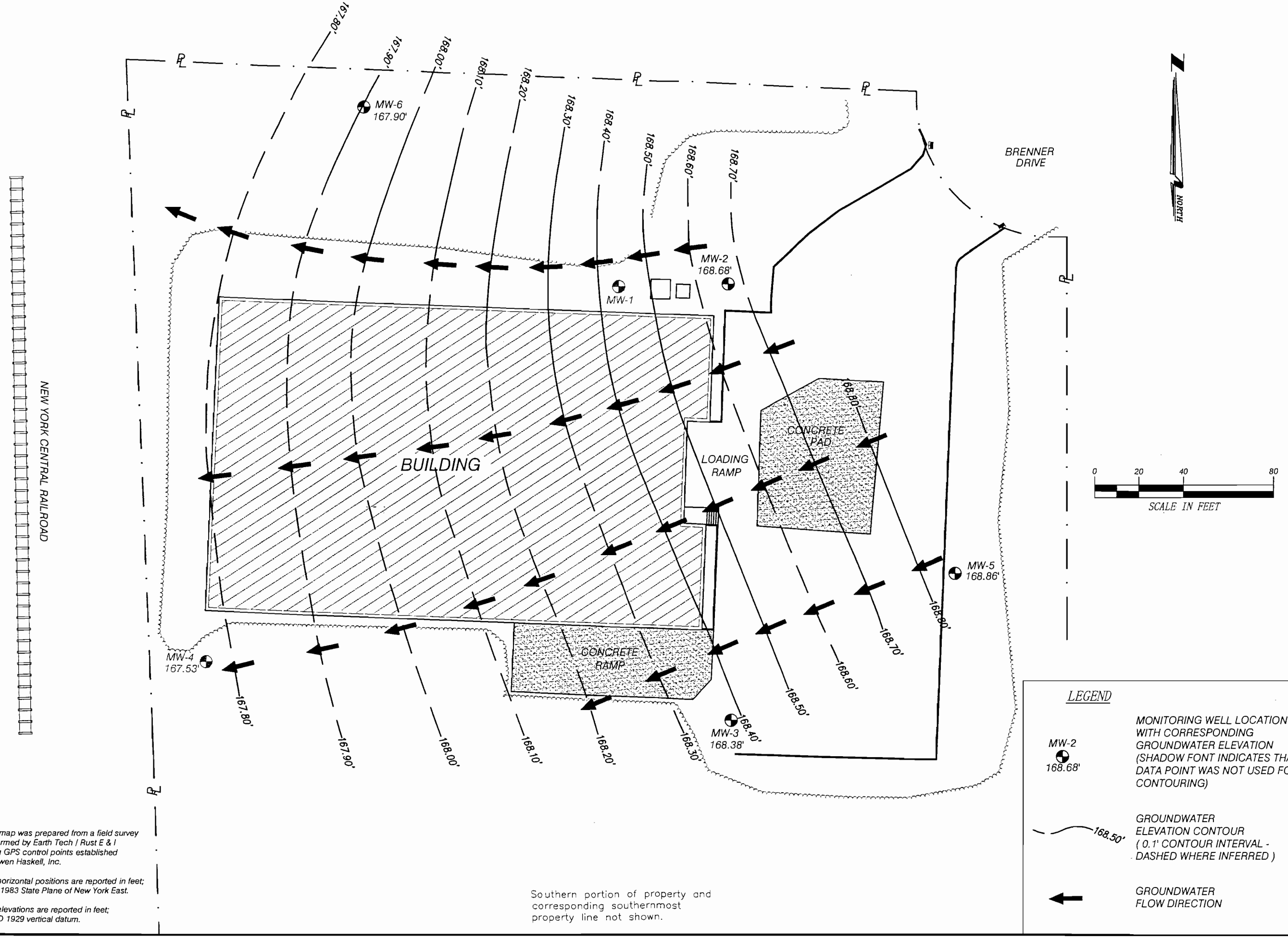
FIGURE 7
GROUNDWATER CONTOUR MAP
(OCTOBER 21, 1998)



Southern portion of property and corresponding southernmost property line not shown.

NOTE:

1. This map was prepared from a field survey performed by Earth Tech / Rust E & I using GPS control points established by Owen Haskell, Inc.
2. The horizontal positions are reported in feet; NAD 1983 State Plane of New York East.
3. The elevations are reported in feet; NGVD 1929 vertical datum.

LEGEND

- MW-2 / 168.68' — MONITORING WELL LOCATION WITH CORRESPONDING GROUNDWATER ELEVATION (SHADOW FONT INDICATES THAT DATA POINT WAS NOT USED FOR CONTOURING)
- 168.50' — GROUNDWATER ELEVATION CONTOUR (0.1' CONTOUR INTERVAL - DASHED WHERE INFERRED)
- GROUNDWATER FLOW DIRECTION

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L:\WROK\43015\CADD\Figure-8.dwg PLOT DATE: 12/02

NOTE:

1. This map was prepared from a field survey performed by Earth Tech / Rust E & I using GPS control points established by Owen Haskell, Inc.
2. The horizontal positions are reported in feet; NAD 1983 State Plane of New York East.
3. The elevations are reported in feet; NGVD 1929 vertical datum.

NEW YORK CENTRAL RAILROAD

BUILDING

CONCRETE RAMP

LOADING RAMP

CONCRETE PAD

BRENNER DRIVE

MW-1 171.00'
MW-2 171.14'
MW-3 171.06'
MW-4 169.57'
MW-5 171.58'
MW-6 169.69'
MW-7 171.34'
MW-8 172.61'
MW-9 162.72'

Southern portion of property and corresponding southernmost property line not shown.

SCALE IN FEET 0 20 40 80

NORTH

LEGEND

- MONITORING WELL LOCATION, WITH CORRESPONDING GROUNDWATER ELEVATION (SHADOW FONT INDICATES THAT DATA POINT WAS NOT USED FOR CONTOURING)
- GROUNDWATER ELEVATION CONTOUR (1.0' CONTOUR INTERVAL - DASHED WHERE INFERRED)
- GROUNDWATER FLOW DIRECTION

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FIGURE 8

GROUNDWATER CONTOUR MAP

(OCTOBER 16, 2000)

L:\WROK\43015\CADD\Figure-9.dwg PLOT DATE: 12/02

NOTE:

1. This map was prepared from a field survey performed by Earth Tech / Rust E & I using GPS control points established by Owen Haskell, Inc.
2. The horizontal positions are reported in feet; NAD 1983 State Plane of New York East.
3. The elevations are reported in feet; NGVD 1929 vertical datum.

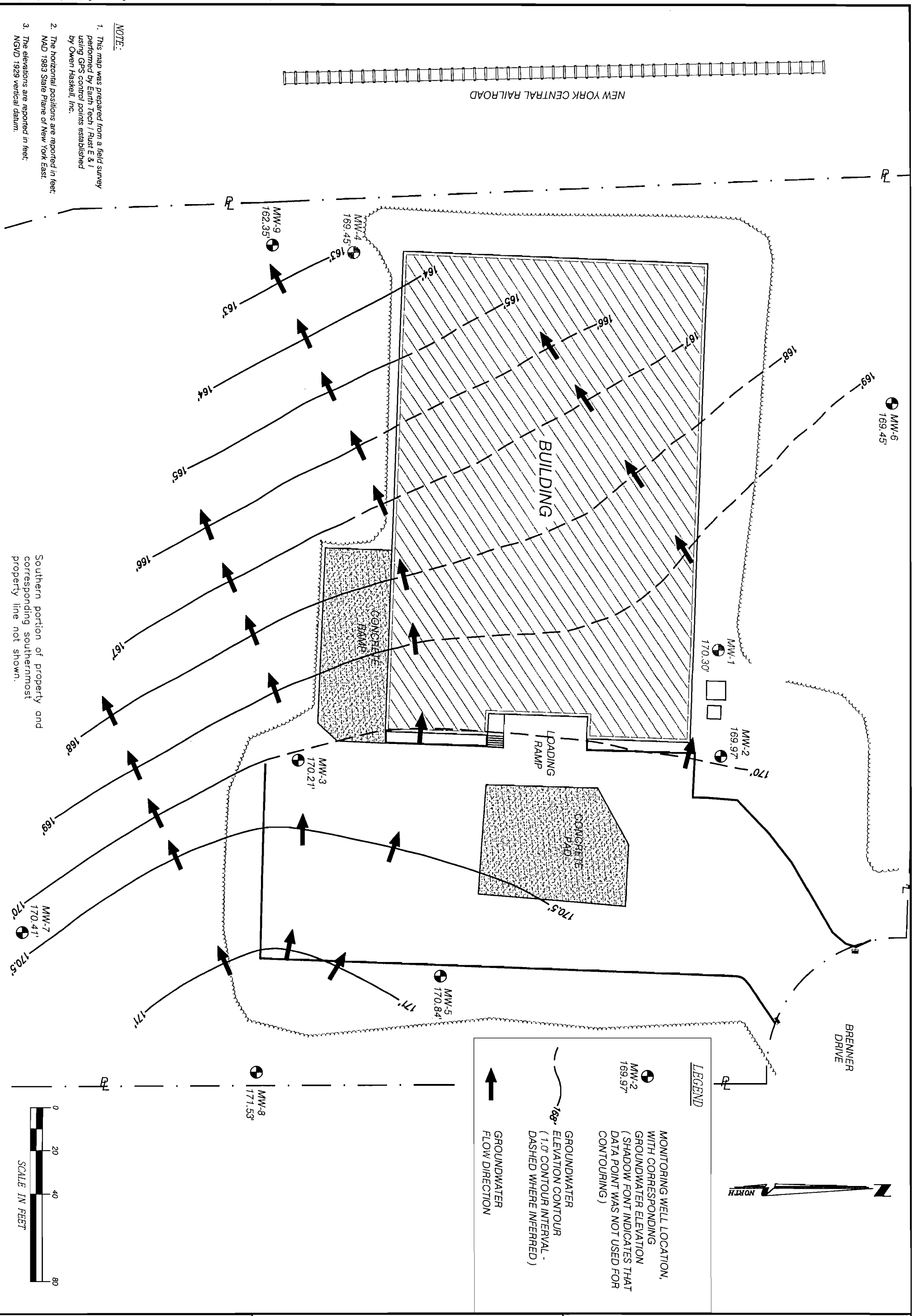

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FIGURE 9

GROUNDWATER CONTOUR MAP

(NOVEMBER 17, 2000)

FIGURE 10
GROUNDWATER CONTOUR MAP
(DECEMBER 7, 2000)

NEW YORK CENTRAL RAILROAD

BRENNER DRIVE

NORTH

MW-6
168.64'

MW-1
170.09'

MW-2
170.21'

MW-4
168.65'

MW-9
161.70'

MW-3
169.39'

MW-5
169.85'

MW-8
170.72'

MW-7
169.58'

BUILDING

LOADING RAMP

CONCRETE PAD

CONCRETE RAMP

167'
168'
169'
169.5'
170'
166'
165'
164'
163'
162'

LEGEND

MW-2
172.21'
MONITORING WELL LOCATION, WITH CORRESPONDING GROUNDWATER ELEVATION (SHADOW FONT INDICATES THAT DATA POINT WAS NOT USED FOR CONTOURING)

168'
GROUNDWATER ELEVATION CONTOUR (1.0' CONTOUR INTERVAL - DASHED WHERE INFERRED)

GROUNDWATER FLOW DIRECTION

0 20 40 80
SCALE IN FEET

Southern portion of property and corresponding southernmost property line not shown.

NOTE:

1. This map was prepared from a field survey performed by Earth Tech / Rust E & I using GPS control points established by Owen Haskell, Inc.
2. The horizontal positions are reported in feet; NAD 1983 State Plane of New York East.
3. The elevations are reported in feet; NGVD 1929 vertical datum.

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FIGURE 11
GROUNDWATER CONTOUR MAP
(MARCH 30, 2001)

LEGEND

- MW-2 180.09' — MONITORING WELL LOCATION, WITH CORRESPONDING GROUNDWATER ELEVATION (SHADOW FONT INDICATES THAT DATA POINT WAS NOT USED FOR CONTOURING)
- 168' — GROUNDWATER ELEVATION CONTOUR (1.0' CONTOUR INTERVAL - DASHED WHERE INFERRED)
- GROUNDWATER FLOW DIRECTION

MW-6 174.60'
MW-1 178.78'
MW-2 180.09'
MW-5 181.34'
MW-4 174.48'
MW-9 168.02'
MW-3 180.33'
MW-8 184.47'
MW-7 181.18'

BUILDING
CONCRETE PAD
CONCRETE RAMP
LOADING RAMP
BRENNER DRIVE
NEW YORK CENTRAL RAILROAD
NORTH

Southern portion of property ond corresponding southernmost property line not shown.

0 20 40 80
SCALE IN FEET

NOTE:

1. This map was prepared from a field survey performed by Earth Tech / Rust E & I using GPS control points established by Owen Haskell, Inc.
2. The horizontal positions are reported in feet; NAD 1983 State Plane of New York East.
3. The elevations are reported in feet; NGVD 1929 vertical datum.

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FIGURE 12
SUMMARY OF GROUNDWATER QUALITY RESULTS (NOVEMBER 17, 2000)

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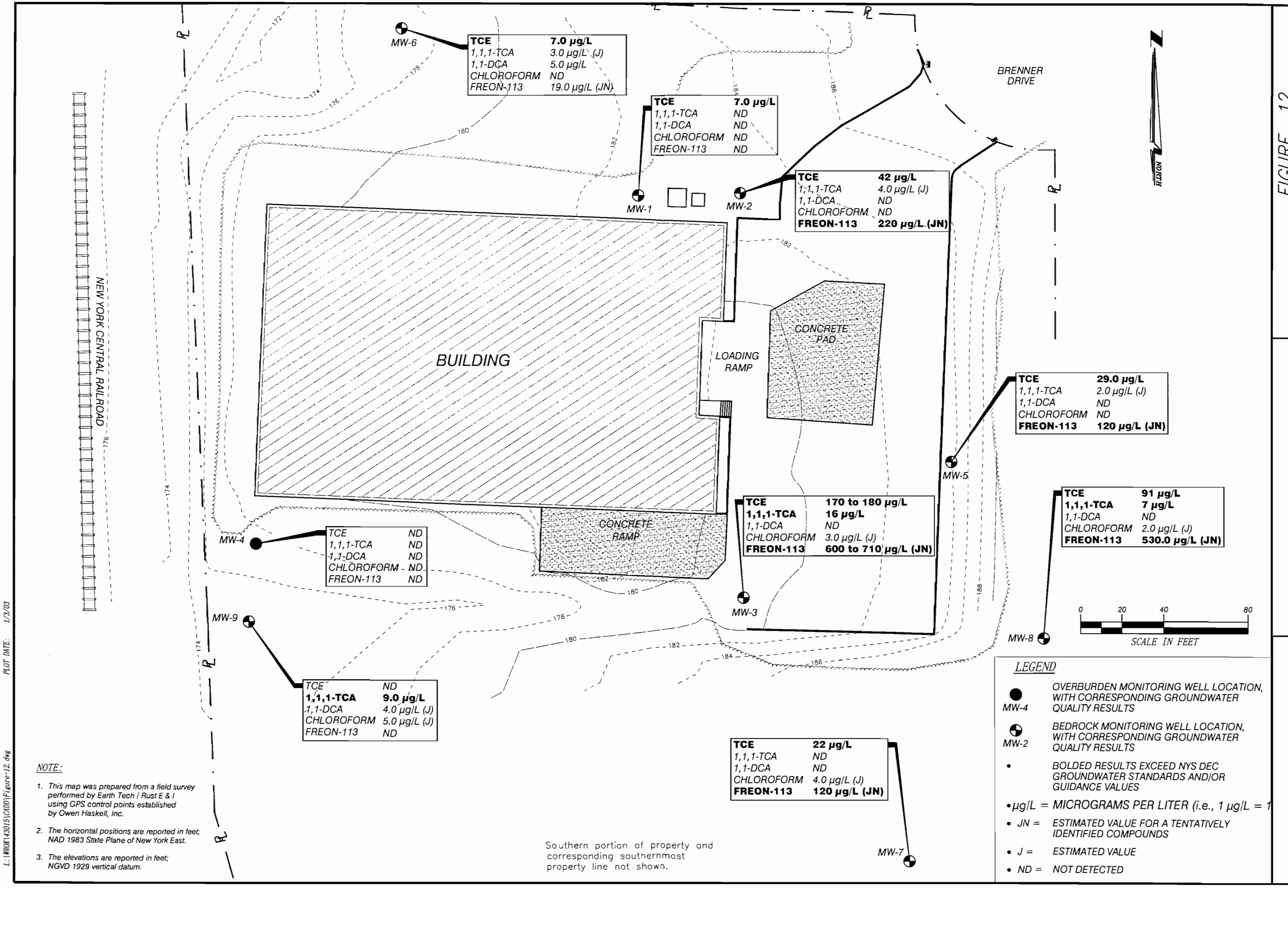
December 2002



LEGEND

- MW-4 — OVERBURDEN MONITORING WELL LOCATION, WITH CORRESPONDING GROUNDWATER QUALITY RESULTS
- MW-2 — BEDROCK MONITORING WELL LOCATION, WITH CORRESPONDING GROUNDWATER QUALITY RESULTS
- • — BOLDED RESULTS EXCEED NYS DEC GROUNDWATER STANDARDS AND/OR GUIDANCE VALUES
- •µg/L = MICROGRAMS PER LITER (i.e., 1 µg/L = 1
- • JN = ESTIMATED VALUE FOR A TENTATIVELY IDENTIFIED COMPOUNDS
- • J = ESTIMATED VALUE
- • ND = NOT DETECTED

Southern portion of property and corresponding southernmost property line not shown.

NOTE:

1. This map was prepared from a field survey performed by Earth Tech / Rust E & I using GPS control points established by Owen Haskell, Inc.
2. The horizontal positions are reported in feet; NAD 1983 State Plane of New York East.
3. The elevations are reported in feet; NGVD 1929 vertical datum.

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PLOT DATE: 1/3/03
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FIGURE 13
SUMMARY OF GROUNDWATER QUALITY RESULTS (MARCH 31, 2001)

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PLOT DATE: 12/02

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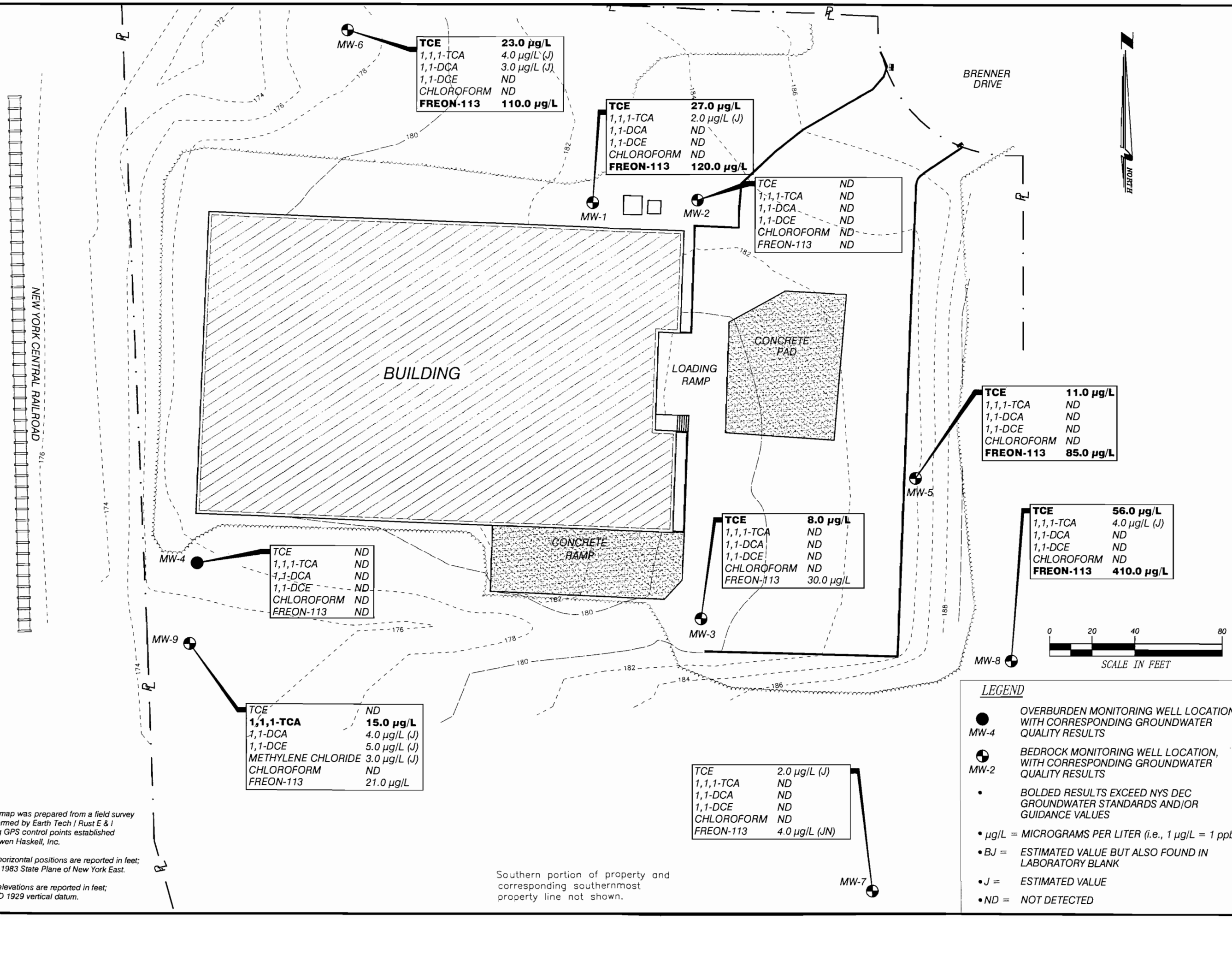

NOTE:

1. This map was prepared from a field survey performed by Earth Tech / Rust E & I using GPS control points established by Owen Haskell, Inc.
2. The horizontal positions are reported in feet; NAD 1983 State Plane of New York East.
3. The elevations are reported in feet; NGVD 1929 vertical datum.

LEGEND

- MW-4 — OVERBURDEN MONITORING WELL LOCATION, WITH CORRESPONDING GROUNDWATER QUALITY RESULTS
- MW-2 — BEDROCK MONITORING WELL LOCATION, WITH CORRESPONDING GROUNDWATER QUALITY RESULTS
- • BOLDED RESULTS EXCEED NYS DEC GROUNDWATER STANDARDS AND/OR GUIDANCE VALUES
- • µg/L = MICROGRAMS PER LITER (i.e., 1 µg/L = 1 ppb)
- • BJ = ESTIMATED VALUE BUT ALSO FOUND IN LABORATORY BLANK
- • J = ESTIMATED VALUE
- • ND = NOT DETECTED

L:\WORK\43015\...\Figure-.dwg PLOT DATE: 1/7/03

NORTH

NEW YORK CENTRAL RAILROAD

BRENNER DRIVE

MW-6
110.0 µg/L

MW-1
120.0 µg/L

MW-2
ND

50 µg/L

BUILDING

LOADING RAMP

MW-5
85.0 µg/L

MW-4
ND

MW-9
21.0 µg/L

MW-3
30.0 µg/L

MW-8
410.0 µg/L

250 µg/L

250 µg/L

50 µg/L

5 µg/L

5 µg/L

MW-7
4.0 µg/L

160'

170'

LEGEND

MW-7 (4.0 µg/L) — BEDROCK MONITORING WELL LOCATION, WITH CORRESPONDING FREON-113 CONCENTRATION (March 31, 2001)

410.0 µg/L — BOLDED RESULTS EXCEED NYS DEC GROUNDWATER STANDARD AND/OR NYSDOH MAXIMUM CONTAMINANT LEVEL (5 µg/L)

5 µg/L — FREON-113 CONCENTRATION CONTOUR (Contour Intervals: 5 µg/L, 50 µg/L, and 250 µg/L)

µg/L = MICROGRAMS PER LITER (i.e., 1 µg/L = 1 ppb)

ND = NOT DETECTED

MW-4 (ND) — OVERBURDEN MONITORING WELL LOCATION, WITH CORRESPONDING FREON-113 CONCENTRATION (March 31, 2001)

170' — BEDROCK SURFACE ELEVATION CONTOUR (See Figure 5)

GROUNDWATER FLOW DIRECTION (See Figure 11)

NOTE:

1. This map was prepared from a field survey performed by Earth Tech / Rust E & I using GPS control points established by Owen Haskell, Inc.
2. The horizontal positions are reported in feet; NAD 1983 State Plane of New York East.
3. The elevations are reported in feet; NGVD 1929 vertical datum.
4. Property boundary shown is approximate. Its use is intended for engineering purposes only.

0 30 60 120

SCALE IN FEET

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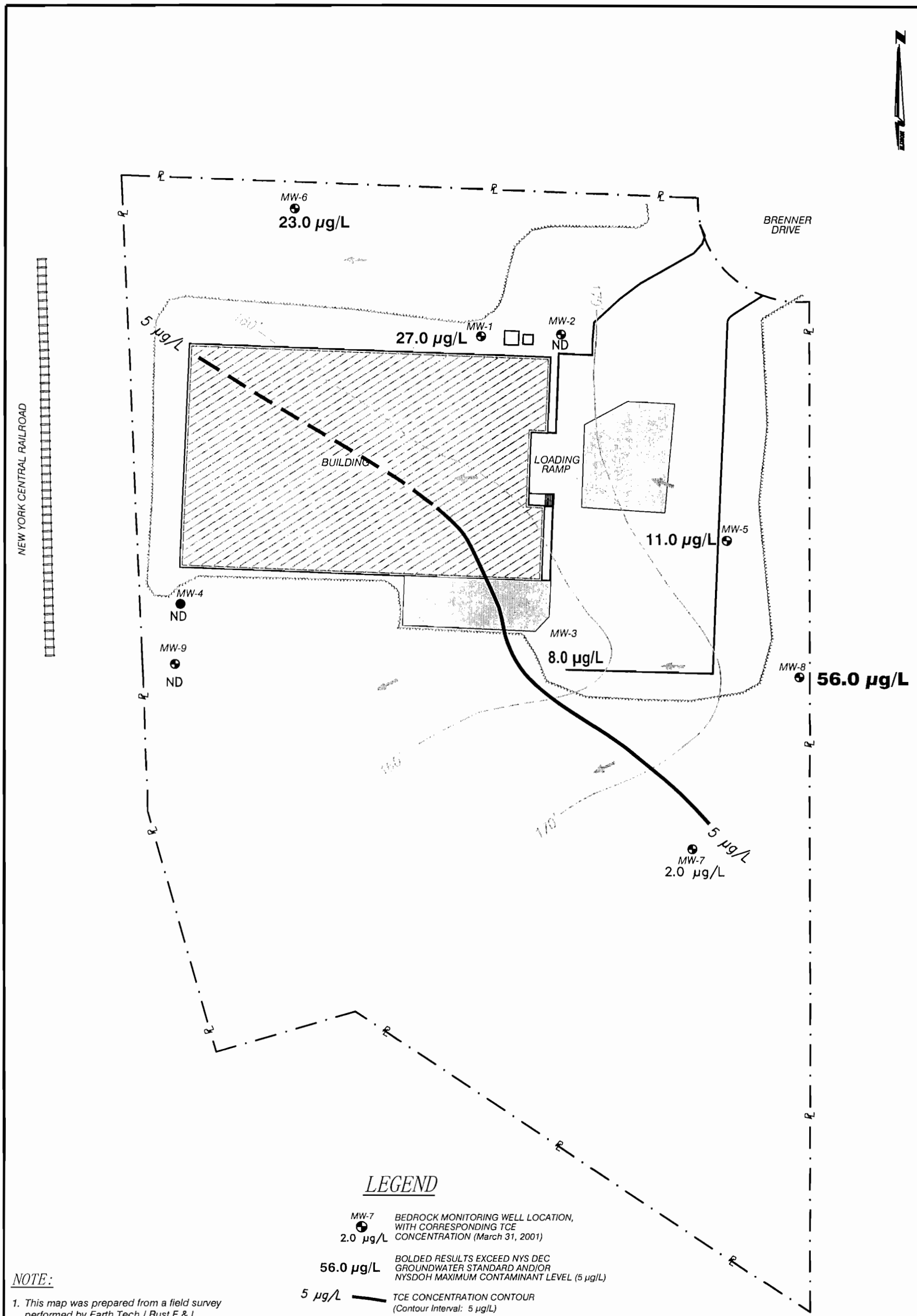
FIGURE 14

SUMMARY OF FREON-113 CONCENTRATIONS IN BEDROCK GROUNDWATER
(March 31, 2001 Sampling Event)



LEGEND

- MW-7 / 2.0 µg/L — BEDROCK MONITORING WELL LOCATION, WITH CORRESPONDING TCE CONCENTRATION (March 31, 2001)
- 56.0 µg/L — BOLDED RESULTS EXCEED NYS DEC GROUNDWATER STANDARD AND/OR NYSDOH MAXIMUM CONTAMINANT LEVEL (5 µg/L)
- 5 µg/L — TCE CONCENTRATION CONTOUR (Contour Interval: 5 µg/L)
- µg/L = MICROGRAMS PER LITER (i.e., 1 µg/L = 1 ppb)
- ND = NOT DETECTED
- MW-4 / ND — OVERBURDEN MONITORING WELL LOCATION, WITH CORRESPONDING TCE CONCENTRATION (March 31, 2001)
- BEDROCK SURFACE ELEVATION CONTOUR (See Figure 5)
- GROUNDWATER FLOW DIRECTION (See Figure 11)

NOTE:

1. This map was prepared from a field survey performed by Earth Tech / Rust E & I using GPS control points established by Owen Haskell, Inc.
2. The horizontal positions are reported in feet; NAD 1983 State Plane of New York East.
3. The elevations are reported in feet; NGVD 1929 vertical datum.
4. Property boundary shown is approximate. Its use is intended for engineering purposes only.

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FIGURE 15

SUMMARY OF TCE CONCENTRATIONS IN BEDROCK GROUNDWATER
(March 31, 2001 Sampling Event)

Formerly V-00322-3

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Eastern Remedial Action, 11th Floor
625 Broadway, Albany, New York 12233-7015
Phone: (518) 402-9620 • **FAX:** (518) 402-9022
Website: www.dec.state.ny.us

Erin M. Crotty
Commissioner

FILE COPY

February 13, 2003

Mr. Paul Maxwell
Wilsonart International
2400 Wilson Place
Post Office Box 6110
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Mr. Mark Williams
Earth Tech
40 British American Blvd, 1st floor
Albany, New York 12110

RE: NYS DEC Voluntary Cleanup Program Site#V-00322-3
Wilsonart International, Inc., 1 Brenner Drive, Congers, New York
Draft Subsurface Investigation Report Comment Responses & Revisions

Dear Messrs. Maxwell and Williams:

Please be advised that the Department has reviewed the above referenced response letter with attached proposed revisions, and has conferred with the NYS Department of Health Bureau of Environmental Exposure Investigation (NYS DOH) as well as the Rockland County Department of Health (RC DOH) regarding review of the document.

The NYS DOH , RC DOH and the Department agree that most revisions appear to be acceptable. However, a few of the revisions identified in the response letter were not apparent in the revision attachments. These revisions include the revised appendices, and the revised report text for disposition of investigation-derived wastes (IDW). The response letter did address revisions to these items, so please incorporate the appropriate revisions within the final investigation report. The following item should also be addressed in the final report:

- Please revise the anticipated annual yearly groundwater flow rate identified in the report conclusions section from 1.8 feet per year to an annual rate consistent with the daily groundwater flow velocity identified within section 5.2.5 of the report.

health concerns, RCDOH sampled several (approximately 27) additional private water wells in this study area to determine the extent of groundwater impacts. These water wells were sampled by RCDOH personnel between January 5, 2001 and February 21, 2001. The NYSDOH drinking water standard for Freon-113 (5 µg/L) was exceeded at 4 of the 27 locations (1 Wells Ave., 18 Wells Ave., 32 Wells Ave., and 22 Sheridan Ave.) where groundwater samples were collected. The only other significant groundwater violation was an exceedance for MTBE (19 µg/L) at the Lake Road property. Four additional private water supply wells were sampled by the RCDOH in August 2001.

According to representatives from the RCDOH and United Water Company, the potable water main was extended by May 2001 and all residents with impacted private wells (except a couple [111 N. Rt. 303 and 117 N. Rt. 303] along N. Route 303) were connected to the public water supply by September 2001. Public water was made available to these two entities in December 2002. The 111 N. Rt. 303 property is currently connected, while it is not known whether the other (117 N. Rt. 303) has made a connection to the most recent extension by United Water. It should be noted that this commercial property already has a treatment system for VOCs.

Earth Tech contends that there is a likely upgradient off-site source for the observed groundwater contamination at the Site and vicinity (see Table 12 and information provided in Appendix B, Water Well Survey). VOC contaminants observed at the Site are likely conveyed via the local hydraulic gradient, which has been demonstrated to be east to west at the Site, and are primarily directed by the configuration of the bedrock surface, the bedding angle of the upper bedrock, and/or groundwater flow along secondary porosity features such as joints, fractures, and solution cavities. The primary VOC contaminants (Freon-113 and TCE) noted at the Site were greatest at the mid-eastern perimeter (upgradient portion) of the Site and lowest along southwestern areas of the Site (Figures 14 and 15). The primary VOC contaminants observed in the vicinity are likely controlled by two prominent north to south linears, which were observed both to the east and west of the Site (refer back to Section 4.2.3, Structural Geologic Setting). The linear features represent potential fractures that may represent preferential flow zones for groundwater in the region. Results from the RCDOH sampling indicate the affected area being ¼-mile southeast of the Site. However, due to the different sampling dates and variability in the well construction depth of affected water supply wells, it would be misleading to contour the Freon-113 and TCE concentrations in groundwater. Based on the conceptual groundwater flow regime described in Section 5.2, the VOCs are expected to migrate with the regional groundwater gradient, and ultimately discharge to Congers Lake, which is believed to represent the discharge point for groundwater in the upper bedrock zone.

* = Highlighted section of text reflects additions or changes to DRAFT Subsurface Investigation Report

Attachment O (Revisions to Section 6.2.3, Page 31/32)

6.2.3 Extent of Groundwater Impacts

INSERT AFTER 3rd Paragraph of Section

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Data from new monitoring well MW-9 indicate that groundwater quality approximately 250 feet downgradient of impacted monitoring well MW-3 exhibits reduced freon-113 and TCE levels as groundwater approaches the western Site boundary. Groundwater sampling performed during the primary and supplemental stages of the SI do not indicate the presence of freon-113 or TCE in groundwater samples collected from MW-9. The apparent improvement in groundwater quality in this area might reflect dilution of contaminants in the upper bedrock zone, natural attenuation processes and/or varying groundwater flow paths. It is likely a combination of these conditions accounts for the changes in concentrations in this area of the plume.

Data from new monitoring wells MW-7 and MW-8 indicate that groundwater quality approximately 100 to 150 feet upgradient of impacted monitoring well MW-3 exhibits the presence of Freon-113 and TCE levels in groundwater along the eastern Site boundary. Additional groundwater sampling results (collected during the second groundwater sampling event) indicate that monitoring well MW-8 exhibits appreciably higher concentrations of Freon-113 and TCE than groundwater from monitoring well MW-3. In addition, significant levels of Freon-113 and TCE were also observed in wells MW-5 and MW-7, which are also upgradient of well MW-3. Although the highest concentration of contaminants were detected at on site well MW-3 during the November 2000 groundwater sampling event, it appears that dilution effects could misrepresent the actual chemistry of the upper bedrock water bearing zone at well MW-8.

The SI groundwater analytical results from monitoring well MW-6 indicates that concentrations of VOCs (Freon-113 and TCE) in slight exceedance of groundwater standards extend beyond the northwestern Site boundary, and onto the neighboring property. In addition, the SI groundwater analytical results from monitoring well MW-9 indicates that concentrations of 1,1,1-TCA slightly exceed groundwater standards beyond the mid-western Site boundary, and onto the neighboring property.

In order to evaluate potential public health concerns the RCDOH conducted an extensive water well survey of the Congers area (Appendix B). The RCDOH also mobilized its staff and sampled several private water wells during the course of this investigation. A summary of the groundwater analytical results from these sampling activities are provided in Table 12. This summary tables includes results for Freon-113, TCE, Freon-11, THM-chloroform, 1,1,1-TCA, PCE, and MTBE along with a comparison of the results to NYSDEC groundwater standards and/or guidance values and NYSDOH drinking water standards.

Originally, RCDOH sampled thirteen private water supply wells within ¼-mile southeast of the Site (Wells Avenue, Sheridan Avenue, Sherman Avenue, Sheridan Avenue, and N. Route 303 area) between December 5, 2000 and December 27, 2000. Two of the wells sampled (19 Wells Avenue and 29 Wells Avenue) exhibited results that exceeded NYSDEC groundwater standards and NYSDOH drinking water standards for TCE and Freon-113. The groundwater sample collected from the 29 Wells Avenue address also violated the NYSDEC groundwater standard for PCE (12 µg/L). The NYSDOH drinking water standard for Freon-113 (5 µg/L) was exceeded at 10 of the 13 locations where groundwater samples were collected. In order to respond to public

Table 12 (Cont.)

Well I.D.	Address	Sample Date	FREON-113	TCE	FREON-11	THM-Chloroform	1,1,1-TCA	PCE	MTBE
Rosario	282 N. Rt. 303	2/12/2001	ND	ND	ND	ND	ND	ND	ND
Hicks	280 N. Rt. 303	2/12/2001	ND	ND	ND	ND	ND	ND	ND
InterElectronics	225 N. Rt. 303	2/1/2001	ND	ND	ND	ND	ND	ND	ND
Restaurant X	117 N. Rt. 303	12/13/2000	1.7	ND	ND	ND	0.5	ND	ND
Schaefer	111 N. Rt. 303	2/15/2001	0.75	ND	ND	ND	ND	ND	ND
Schaefer	111 N. Rt. 303	8/31/2001*	ND	ND	ND	ND	0.87	ND	ND
Smith	84 N. Rt. 303	8/14/2001	ND	ND	ND	0.55	ND	ND	ND
Dellolio	80 N. Rt. 303	8/14/2001	ND	ND	ND	0.68	ND	ND	ND
Araneo	78 N. Rt. 303	8/14/2001	ND	ND	ND	ND	ND	ND	ND
Laven	55 N. Rt. 303	2/14/2001	ND	ND	ND	ND	ND	ND	ND
Leonakis	31 Liberty Ave.	2/8/2001	ND	ND	ND	ND	ND	ND	ND
Bianco	31 Endicott St.	2/14/2001	ND	ND	ND	ND	ND	ND	ND
Marin	33 Endicott St.	2/14/2001	ND	ND	ND	ND	ND	ND	ND
Mangan	25 N. Congers Ave.	2/14/2001	ND	ND	ND	ND	ND	ND	ND
Scheu	31 N. Congers Ave.	2/7/2001	ND	ND	ND	ND	ND	ND	ND
Ochs	58 N. Congers Ave.	2/14/2001	ND	ND	ND	ND	ND	ND	ND
Meredith	26 S. Congers Ave.	2/14/2001	ND	ND	ND	ND	ND	ND	ND
O'Grady	32 S. Conger Ave	2/14/2001	ND	ND	ND	ND	ND	ND	4.6
Pollard	55 Old Haverstraw Rd.	2/7/2001	ND	ND	ND	ND	ND	ND	ND
Steiner-Sishock	123 Old Haverstraw Rd.	2/14/2001	ND	ND	ND	ND	ND	ND	ND
Asenico	43 N. Harrison Ave.	2/14/2001	ND	ND	ND	ND	ND	ND	ND
Leto	11 N. Grant Ave.	2/9/2001	ND	ND	ND	ND	ND	ND	ND

Notes:

Listed compounds are those that have been detected in groundwater.

All reported values are expressed in micrograms per Liter (µg/L).

Groundwater standards are NYS Ambient Water Quality Standards and Guidance Values (G) and Groundwater Effluent Limitations (June 1998).

Bolded values exceed NYSDEC groundwater standards or guidance values.

Italicized values exceed NYSDOH drinking water standards.

Practical Quantitation Limit for Chloroform, Trichloroethene, FREON-113, FREON-11, 1,1,1-Trichloroethane, PCE, and MTBE is 5 µg/L.

ND = Not Detected at or above Practical Quantitation Limit.

NYSDEC groundwater standard and NYSDOH drinking water standard for TCE, TCA, and PCE is 5 µg/L.

NYSDEC groundwater guidance value for MTBE is 10 µg/L.

NYSDEC groundwater standard for FREON-113 is 50 µg/L while the NYSDOH drinking water standard is 5 µg/L.

Result exceeds NYSDEC groundwater standards or guidance values.

Result exceeds NYSDOH drinking water standard but does not exceed NYSDEC groundwater standard.

* = Also had 0.55 µg/L of 1,1-DCA [NYSDEC groundwater standard and NYSDOH drinking water standard for 1,1-DCA is 5 µg/L].

All private water well owners with Freon-113 and TCE-impacted groundwater are connected to the public water supply system as of September 2001, except 111 N. Rt. 303 (which was connected in December 2002) and 117 N. Route 303 (which has a treatment system for VOCs).

Table 12

Summary of Residential/Commercial Well Sampling by RCDOH
Congers, Rockland County, New York

Well I.D.	Address	Sample Date	FREON-113	TCE	FREON-11	THM-Chloroform	1,1,1-TCA	PCE	MTBE
Anka Tool & Die	150 Brenner Drive	2/14/2001	0.77	ND	ND	0.54	ND	ND	ND
Oneil	32 Wells Ave.	2/13/2001		ND	ND	0.31	ND	ND	ND
Egger	29 Wells Ave.	12/5/2000	***~200***	***14***	3.2	2.4	1.3	**12**	ND
Campanella	26 Wells Ave.	12/20/2000		0.98	ND	ND	ND	ND	ND
Ina Festa	19 Wells Ave.	12/27/2000	**84**	***8.2***	ND	1.1	0.74	ND	ND
Oliveri	18 Wells Ave.	2/14/2001		0.7	ND	4.8	ND	ND	ND
Nazarro	2 Wells Ave.	12/20/2000		3.8	ND	16	ND	ND	ND
Tedesco	1 Wells Ave.	1/17/2001		2	ND	8.4	ND	ND	ND
Horowitz	22 Sheridan Ave.	1/5/2001		2	ND	1.4	ND	ND	ND
Jaxel	23 Sheridan Ave.	12/21/2000		0.93	ND	0.53	ND	ND	ND
Regina	35 Sheridan Ave.	12/20/2000		1.1	ND	0.62	ND	ND	ND
Barrett	43 Sheridan Ave.	12/22/2000		3.1	ND	1.2	ND	ND	ND
Cole	40 Sheridan Ave.	2/8/2001	ND	ND	ND	ND	ND	ND	ND
Sharkey	70 Sheridan Ave.	1/17/2001	ND	0.63	ND	ND	ND	ND	ND
Secor	13 Sherman Ave.	12/27/2000		1.6	ND	8.8	ND	ND	5
Parker	27 Southward St.	12/21/2000	4.4	ND	ND	0.66	ND	ND	ND
Tobin	35 Southward St.	12/21/2000		1.5	ND	10	ND	ND	ND
Ricks Club Amer	Lake Road	2/21/2001	ND	ND	ND	ND	1.3	ND	**19**
Woods	50 Burnside Ave.	12/20/2000		1.6	ND	ND	ND	ND	ND
Shine	20 Hemlock Dr.	2/14/2001	ND	ND	ND	ND	ND	ND	ND
Delellis	16 Hilltop	12/27/2000	ND	ND	ND	ND	ND	ND	ND
Delellis	16 Hilltop	8/21/2001	ND	ND	ND	ND	ND	ND	ND

Notes:

Listed compounds are those that have been detected in groundwater.

All reported values are expressed in micrograms per Liter (µg/L).

Groundwater standards are NYS Ambient Water Quality Standards and Guidance Values (G) and Groundwater Effluent Limitations (June 1998).

Bolded values exceed NYSDEC groundwater standards or guidance values.

Italicized values exceed NYSDOH drinking water standards.

Practical Quantitation Limit for Chloroform, Trichloroethene, FREON-113, FREON-11, 1,1,1-Trichloroethane, PCE, and MTBE is 5 µg/L.

ND = Not Detected at or above Practical Quantitation Limit.

NYSDEC groundwater standard and NYSDOH drinking water standard for TCE, TCA, and PCE is 5 µg/L. NYSDEC groundwater guidance value for MTBE is 10 µg/L. NYSDEC groundwater standard for FREON-113 is 50 µg/L while the NYSDOH drinking water standard is 5 µg/L.

Result exceeds NYSDEC groundwater standards or guidance values.

Result exceeds NYSDOH drinking water standard but does not exceed NYSDEC groundwater standard.

ATTACHMENT O

WILSONART RESPONSE TO COMMENT NO. 14: RE: TABLE 12 (VOLUME 1 OF 2)

groundwater analytical results are usable, and no significant data validation issues were identified.

* = Highlighted section of text reflects additions to DRAFT Subsurface Investigation Report

6.2.2 Groundwater Analytical Results

INSERT AFTER 6th Paragraph of Section

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No VOCs were detected in MW-4 during the first round or second round. The data indicates that groundwater in the overburden hydrogeologic unit at well MW-4 is not impacted by TCE, 1,1,1-TCA or Freons.

Prior to initiating the second groundwater sampling event, additional efforts were undertaken to better understand localized horizontal flow zones in the upper bedrock groundwater and gain insight into Site groundwater quality trends. On March 23, 2001, Earth Tech measured and recorded in-well field parameters (i.e., temperature, specific conductivity, pH, turbidity, and dissolved oxygen) at monitoring wells MW-3, MW-5, MW-7, and MW-8. The temperature profiling data collected from MW-3, MW-5, MW-7, and MW-8 are provided in Tables 8, 9, 10, and 11, respectively. Although it is important not to over interpret the profiling data, results indicate a change in temperature in the screened interval of each tested bedrock monitoring well. Further observations included:

- General comparable field parameter trends noted between MW-3 / MW-8 and MW-5 / MW-7;
- Changes in temperature within the screened interval may reflect the most degree of fracturing and possibly greatest potential for bedrock groundwater flow (best exhibited at MW-3 [20-24'], MW-5 [20-24'], MW-7 [23-27'], and MW-8 [26-31'];
- Observed specific conductivity values appeared to be, in general, more stable and slightly higher (5 to 10 µmhos) in the screened interval than the upper portion of the water column;
- No consistent patterns emerged from the evaluation of the pH data although consistent trends were noted during testing of each individual monitoring well;
- Turbidity readings appear to be, in general, higher with depth (most notably at wells MW-3 and MW-8). Variations in turbidity within the screened interval likely reflect "stirring up" sediment from the well sump or due to minor differences in groundwater flow rates within the fractured bedrock; and
- Observed dissolved oxygen readings were lower in the screened interval (ranged from .33 mg/L at MW-3 to 1.3 mg/L at MW-8) than the upper portion of the water column.

Typically, temperatures were 2° Celsius warmer in the screened interval, which reaffirmed the need to further characterize groundwater quality (collect groundwater samples at depth discrete intervals), compare results, and assess the potential for dilution, stratification, and temporal changes.

A Kemmerer sampler was used to collect depth-discrete (i.e., 1 to 2 feet from the bottom of each monitoring well) groundwater samples from impacted monitoring wells MW-3 and MW-8 to further characterize groundwater quality and assess the potential for dilution, stratification, and temporal changes. These groundwater samples were analyzed for EPA 624 VOA, Freon-113 plus TICs with Category B deliverables. A summary of the groundwater analytical results from this round of sampling (March 30, 2001) is included in Table 7 and Figure 13. Copies of the laboratory analytical report for the Phase 1 groundwater sampling (supplemental stage of the SI) and Earth Tech's DUSR report are included in Appendix H. According to the DUSRs, the

Table 11

Temperature Profiling Data (3/23/01)
Former Wilsonart International, Inc. Facility
Congers, New York
WELL: MW-8 (W.L. = 14.05')

feet BMP	Temperature (Celsius)	Conductivity (µmhos)	pH (s.u.)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
14-15	8.7	410	5.82	11.6	9.03
15-16	9.6	413	6.23	10.4	8.24
16-17	10.0	415	6.45	10.2	7.34
17-18	10.2	415	6.63	10.1	7.07
18-19	10.6	414	6.75	10.5	6.90
19-20	10.5	415	6.88	10.5	6.97
20-21	10.6	414	6.93	8.6	6.79
21-22	10.9	414	6.97	10.5	6.70
22-23	11.1	414	7.01	11.3	6.60
23-24	11.0	414	7.05	11.6	6.58
24-25	11.3	414	7.13	15.4	6.46
25-26	11.3	415	7.17	14.0	6.43
26-27	11.5	414	7.22	15.1	6.38
27-28	11.7	413	7.22	17.0	6.32
28-29	12.0	414	7.23	32.2	6.08
29-30	12.2	414	7.26	42.0	6.06
30-31	12.3	414	7.26	43.3	5.91
31-32	12.4	415	7.26	46.9	5.92
32-33	12.4	415	7.28	59.0	5.96
33-34	12.5	415	7.31	54.5	5.90
34-35	12.4	415	7.31	49.4	5.91
35-36	12.5	416	7.31	55.4	5.92
36-37	12.5	416	7.32	48.7	5.93
37-38	12.6	418	7.32	64.4	5.94
38-39	12.6	420	7.33	55.9	5.93
39-40	12.6	424	7.33	55.1	5.95
40-41	12.6	427	7.33	67.3	5.97
41-42	12.6	426	7.33	69.8	5.97
42-43	12.7	435	7.34	69.1	6.02
43-44	12.7	436	7.33	66.7	6.07
44-45	12.7	437	7.34	55.4	6.05
45-46	12.7	439	7.34	46.0	6.06
46-47	12.7	446	7.34	33.9	6.07
Bottom of Well	12.7	441	7.33	489.0	6.07

Notes:
Highlighted section denotes screened interval of upper bedrock monitoring well.
Average temperature above screened interval is 10.5 degrees Celsius while the temperature is markedly warmer in screened interval (average is 12.4). Average specific conductivity values for above screened interval and in screened interval are 414 µmhos and 422 µmhos, respectively. Average pH readings for above screened interval and in screened interval are 6.8 s.u and 7.3 s.u., respectively. Average turbidity readings for above screened interval and in screened interval are 11.2 NTU and 49.9 NTU, respectively. Average dissolved oxygen values for above screened interval and in screened interval are 7.1 mg/L and 6.0 mg/L, respectively.

Table 10

Temperature Profiling Data (3/23/01)
Former Wilsonart International, Inc. Facility
Congers, New York
WELL: MW-7 (W.L. = 13.68')

feet BMP	Temperature (Celsius)	Conductivity (µmhos)	pH (s.u.)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
13-14	7.6	410	5.82	88.2	11.48
14-15	8.3	413	6.23	1.0	7.90
15-16	8.6	415	6.45	0.7	7.05
16-17	8.7	415	6.63	0.7	6.83
17-18	9.1	414	6.75	0.6	6.70
18-19	9.3	415	6.88	0.6	6.70
19-20	9.7	414	6.93	0.5	6.69
20-21	9.8	414	6.97	0.5	6.64
21-22	10.1	414	7.01	0.5	6.69
22-23	10.4	414	7.05	0.4	6.68
23-24	10.5	414	7.13	0.4	6.67
24-25	10.9	415	7.17	0.6	6.67
25-26	10.9	414	7.22	0.4	6.72
26-27	11.1	413	7.22	0.3	6.76
27-28	11.1	414	7.23	0.4	6.75
28-29	11.1	414	7.26	0.3	6.77
29-30	11.2	414	7.26	0.3	6.77
30-31	11.2	415	7.26	0.2	6.75
31-32	11.3	415	7.28	0.3	6.75
32-33	11.2	415	7.31	0.6	6.69
33-34	11.2	415	7.31	0.5	6.40
34-35	11.3	416	7.31	0.8	5.51
35-36	11.3	416	7.32	0.8	6.08
36-37	11.3	418	7.32	0.2	5.44
37-38	11.3	420	7.33	0.5	4.28
38-39	11.3	424	7.33	3.1	4.59
39-40	11.3	427	7.33	0.4	5.10
40-41	11.3	426	7.33	0.4	5.05
41-42	11.3	430	7.34	8.7	5.01
42-43	11.3	436	7.34	55.3	4.96
Bottom of Well	11.3	445	7.35	63.9	4.81

Notes:
Highlighted section denotes screened interval of upper bedrock monitoring well.
Average temperature above screened interval is generally 9.2 degrees Celsius while the temperature is markedly warmer in screened interval (average is 11.2). Average specific conductivity values for above screened interval and in screened interval are 414 µmhos and 419 µmhos, respectively. Average pH readings for above screened interval and in screened interval are 6.7 s.u and 7.3 s.u., respectively. Average turbidity readings for above screened interval and in screened interval are 0.6 NTU and 1.0 NTU, respectively (excludes 13-14' due to sedimentation on probe). Average dissolved oxygen values for above screened interval and in screened interval are 7.3 mg/L and 6.0 mg/L, respectively.

Table 9

Temperature Profiling Data (3/23/01)
Former Wilsonart International, Inc. Facility
Congers, New York
WELL: MW-5 (W.L. = 2.72')

feet BMP	Temperature (Celsius)	Conductivity (µmhos)	pH (s.u.)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
2-3	7.2	413	7.03	29.2	7.07
3-4	6.7	419	7.02	10.2	7.24
4-5	6.6	459	7.01	6.1	5.36
5-6	6.8	478	7.08	9.4	4.47
6-7	7.1	478	7.08	7.7	4.19
7-8	7.4	479	7.10	4.0	4.08
8-9	7.5	478	7.12	3.4	4.00
9-10	7.7	480	7.11	3.8	3.97
10-11	7.9	479	7.13	7.0	3.91
11-12	8.4	480	7.11	4.2	3.94
12-13	8.6	482	7.12	2.8	3.93
13-14	9.3	478	7.12	3.3	3.85
14-15	9.2	481	7.12	3.5	3.94
15-16	9.7	480	7.13	3.5	3.91
16-17	10.1	482	7.11	2.8	3.95
17-18	10.4	481	7.13	2.8	3.95
18-19	10.7	483	7.12	2.5	3.96
19-20	10.9	483	7.11	2.7	3.99
20-21	11.1	484	7.12	2.6	4.00
21-22	11.5	483	7.11	2.9	3.98
22-23	11.7	482	7.11	2.7	3.96
23-24	12.0	481	7.12	2.3	3.91
24-25	12.2	480	7.12	2.4	3.87
25-26	12.3	481	7.12	2.4	3.88
26-27	12.4	480	7.13	2.4	3.82
27-28	12.4	480	7.13	2.3	3.85
28-29	12.5	480	7.12	2.3	3.84
29-30	12.5	479	7.10	2.4	3.84
Bottom of Well	12.6	479	7.09	332	3.86

Notes:
Highlighted section denotes screened interval of upper bedrock monitoring well.
Average temperature above screened interval is 8.5 degrees Celsius while the temperature is markedly warmer in screened interval (average is 12.1). Average specific conductivity values for above screened interval and in screened interval are 471 µmhos and 481 µmhos, respectively. Average pH readings for above screened interval and in screened interval are 7.1 s.u and 7.1 s.u., respectively. Average turbidity readings for above screened interval and in screened interval are 6.1 NTU and 2.5 NTU, respectively. Average dissolved oxygen values for above screened interval and in screened interval are 4.4 mg/L and 3.9 mg/L, respectively.

Table 8

Temperature Profiling Data (3/23/01)
Former Wilsonart International, Inc. Facility
Congers, New York
WELL: MW-3 (W.L. = +0.27')

feet BMP	Temperature (Celsius)	Conductivity (µmhos)	pH (s.u.)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
1-2	10.6	432	7.10	3.2	7.89
2-3	10.5	431	6.85	3.0	7.38
3-4	10.6	434	6.73	3.3	7.25
4-5	10.5	434	6.66	3.1	7.20
5-6	10.7	434	6.62	3.8	7.17
6-7	10.6	435	6.57	4.8	7.18
7-8	10.6	435	6.55	4.1	7.16
8-9	10.5	435	6.54	5.0	7.17
9-10	10.6	433	6.53	3.7	7.14
10-11	10.5	435	6.52	3.6	7.16
11-12	10.6	435	6.51	3.5	7.16
12-13	10.6	433	6.51	2.8	7.16
13-14	10.6	434	6.50	2.6	7.18
14-15	10.5	434	6.49	2.8	7.17
15-16	10.6	433	6.49	2.6	7.21
16-17	10.6	436	6.49	3.0	7.19
17-18	10.6	436	6.49	3.0	7.19
18-19	10.6	436	6.51	2.8	7.15
19-20	10.7	436	6.51	4.5	7.09
20-21	10.8	437	6.51	5.0	7.04
21-22	11.3	438	6.52	8.3	6.94
22-23	11.5	441	6.53	11.4	6.94
23-24	11.7	444	6.52	14.4	6.92
24-25	11.8	443	6.53	20.5	6.93
25-26	11.8	444	6.53	29.4	6.88
26-27	11.8	444	6.52	33.1	6.85
27-28	11.8	444	6.53	34.7	6.81
28-29	11.9	444	6.53	37.8	6.78
Bottom of Well	12.1	512	6.53	39.2	4.85

Notes:
Highlighted section denotes screened interval of upper bedrock monitoring well.
Average temperature above screened interval is generally 10.6 degrees Celsius while the temperature is markedly warmer in screened interval (typically 11.3 to 11.9). Average specific conductivity values for above screened interval and in screened interval are 434 µmhos and 442 µmhos, respectively. Average pH readings for above screened interval and in screened interval are 6.59 s.u and 6.52 s.u., respectively. Average turbidity readings for above screened interval and in screened interval are 3.37 NTU and 19.9 NTU, respectively. Average dissolved oxygen values for above screened interval and in screened interval are 7.23 mg/L and 6.9 mg/L, respectively.

ATTACHMENT N

WILSONART RESPONSE TO COMMENT NO. 13: RE: TABLES 8 – 11 (VOLUME 1 OF 2)

Attachment M (Revisions to Section 6.2.2, Page 30)

6.2.2 Groundwater Analytical Results

INSERT AFTER 4th Paragraph of Section

During the March 2001 groundwater sampling (Phase 2 of the supplemental stage of the SI), the highest concentrations of VOCs were detected in well MW-8, located at the upgradient Site boundary, with total VOC levels of 470 (462 ppb in the field duplicate sample). The data indicates that well MW-1, located along the northwestern corner of the Site, contains the next highest concentration of VOCs, 149 ppb. Lower concentrations of a few VOCs were detected in wells MW-2, MW-3, MW-5, MW-6, and MW-9 during this sampling round. The total VOC concentration in MW-3, which was highest on the November 17, 2000 sampling event, was only 38 ppb. The compounds exhibiting the highest concentrations in these wells were Freon -113 and TCE. Mapping of the primary contamination contours (Freon-113 and TCE) was performed to demonstrate the distribution of these contaminants at the Site. Based on available data, the primary VOC contaminants (Freon-113 and TCE) noted at the Site were greatest at the mid-eastern perimeter (upgradient portion) of the Site and lowest along southwestern areas of the Site (Figures 14 and 15). No VOCs were detected in well MW-4 during the March 2001 groundwater sampling event.

* = Highlighted section of text reflects additions or changes to DRAFT Subsurface Investigation Report

ATTACHMENT M

WILSONART RESPONSE TO COMMENT NO. 12 (PART II): RE: FIGURES (VOLUME 1 OF 2)

The Department is anxious to move ahead with the processing of an assignable release and covenant not to sue based upon the results of the investigation. However, this step of the Voluntary Cleanup Program (VCP) is dependent upon receipt and acceptance of the final investigation report. Once the release has been issued, the volunteer must implement appropriate institutional controls within 30 calendar days. The volunteer should move forward with appropriate deed restrictions regarding no use of groundwater at the site, to allow for submission of satisfactory evidence of implementation to the Department within the required timeframe.

Please submit the final investigation report document to the Department for approval within 14 calendar days of receipt of this letter. The number of copies listed in the voluntary cleanup agreement should be submitted. If there are any questions regarding the information within this letter I can be reached at (518) 402-9620.

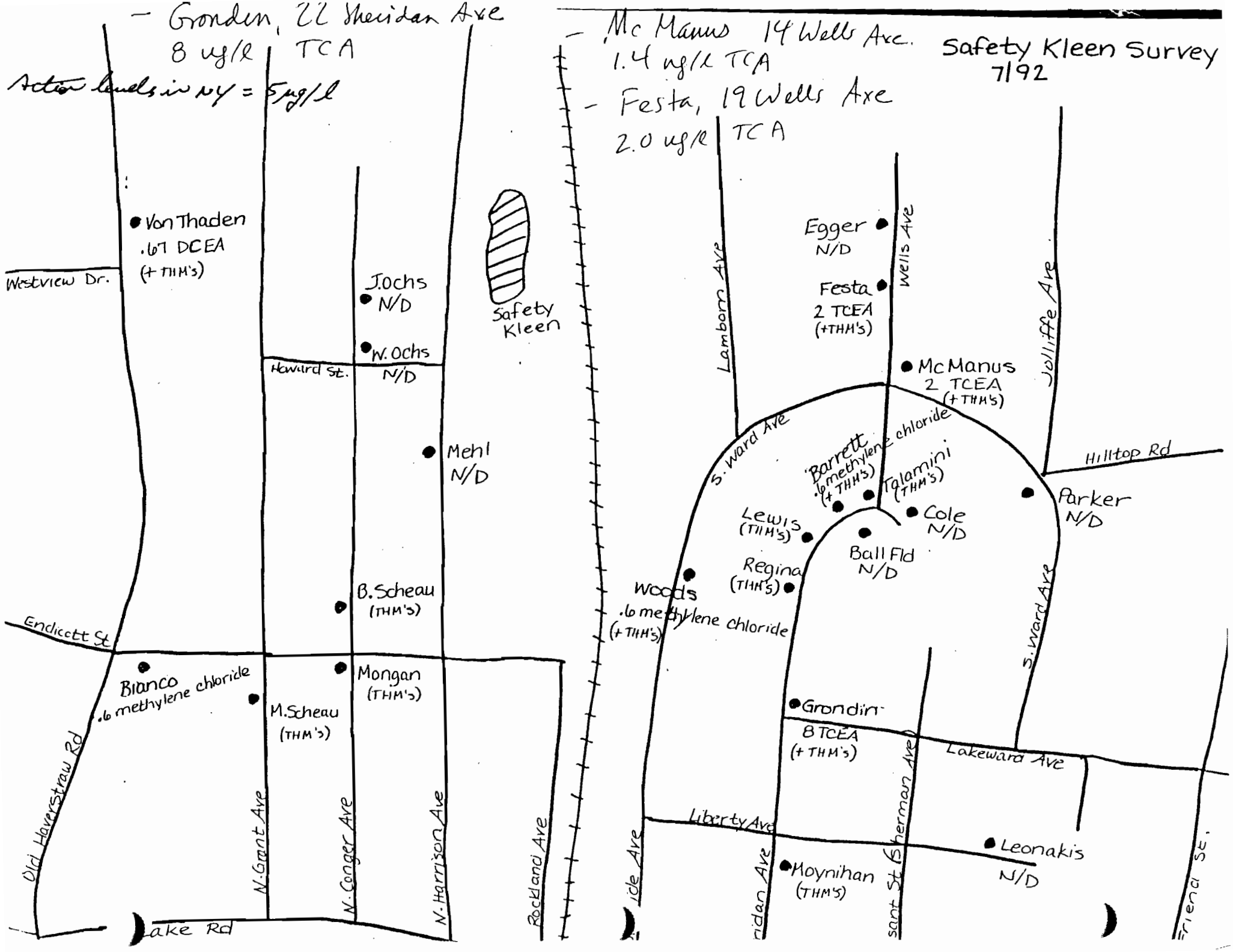
Sincerely,

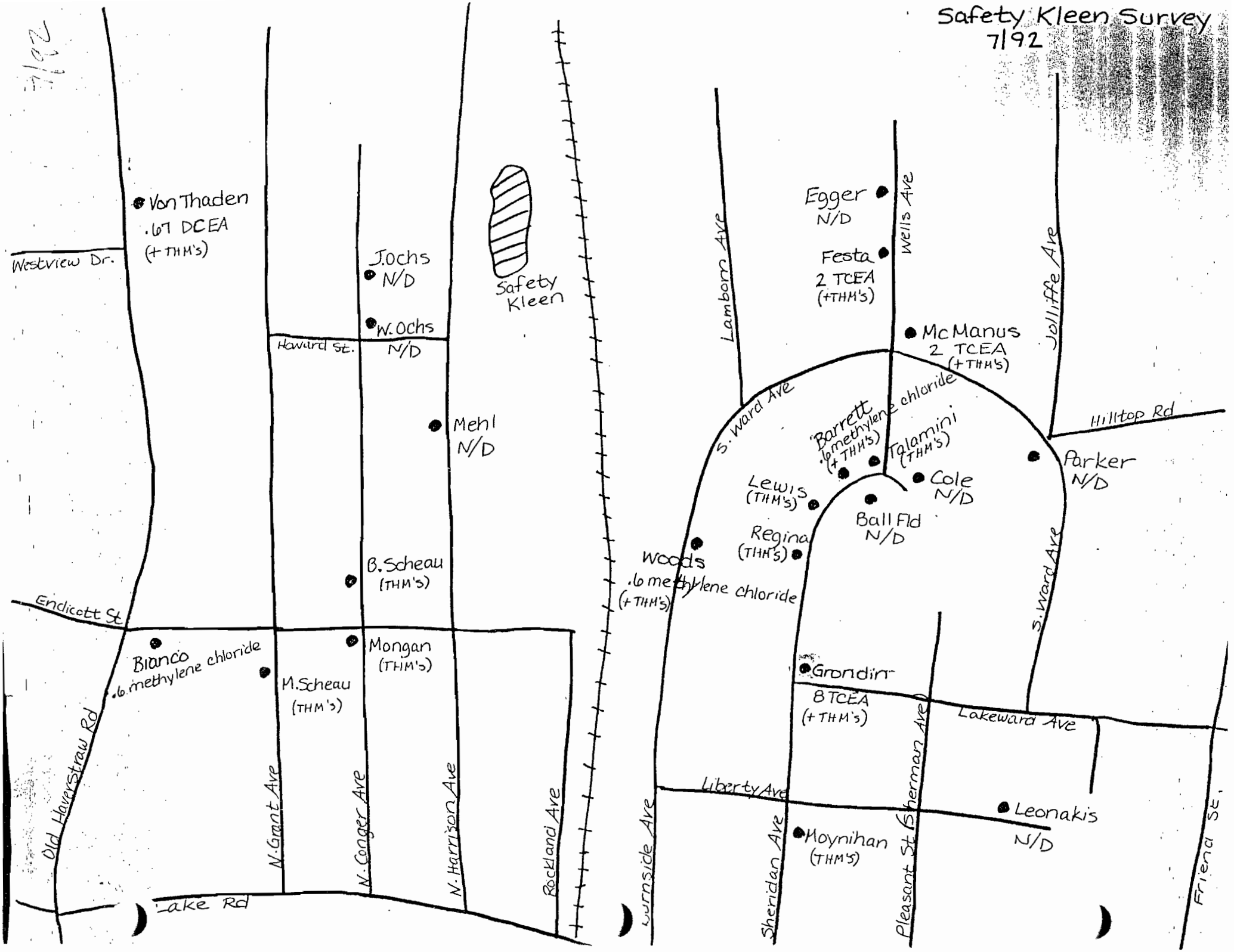
Christopher Alonge, P.E.
DEC DER Project Manager

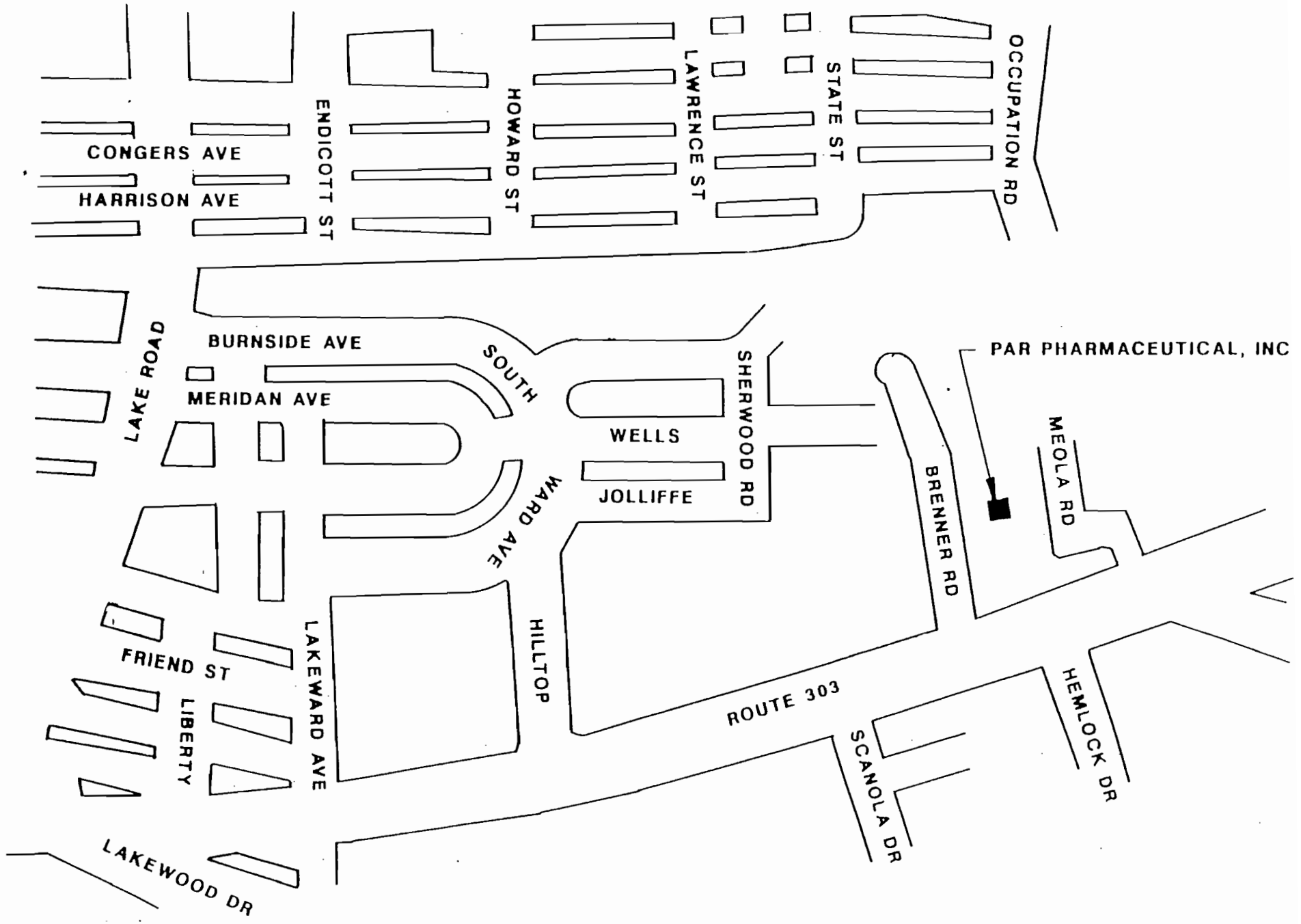
cc: John Olm - NYS DOH BEEI (by e-mail)
Daniel Miller, Ph.D. - RC DOH (by e-mail)
Kevin Carpenter, P.E. - NYS DEC DER BERA RSB (by e-mail)
Ram Pergadia, P.E. - NYS DEC DER Region 3 (by e-mail)
Michael Lesser, Esq. - NYS DEE Albany (by e-mail)
G. Heitzman/C.Alonge/file

APPENDIX B

SITE VICINITY PLAN/WATER WELL SURVEY/AERIAL PHOTOGRAPHIC REVIEW


- Grondin, 22 Sheridan Ave
8 ug/l TCA
Action levels in NY = 5 ug/l
- McManus 14 Wells Ave.
1.4 ug/l TCA
- Festa, 19 Wells Ave
2.0 ug/l TCA
Safety Kleen Survey
7/92
Van Thaden
.67 DCEA
(+ THM's)
Westview Dr.
J. Ochs
N/D
W. Ochs
N/D
Howard St.
Safety Kleen
Mehl
N/D
B. Scheau
(THM's)
Endicott St.
Bianco
.6 methylene chloride
M. Scheau
(THM's)
Mongan
(THM's)
Old Haverstraw Rd
N. Grant Ave
N. Conger Ave
N. Harrison Ave
Rockland Ave
Lake Rd
Egger
N/D
Festa
2 TCEA
(+THM's)
Lamborn Ave
Wells Ave
Jolliffe Ave
McManus
2 TCEA
(+THM's)
S. Ward Ave
Barrett
.6 methylene chloride
(+ THM's)
Talamini
(THM's)
Hilltop Rd
Parker
N/D
Lewis
(THM's)
Cole
N/D
Ball Fld
N/D
Regina
(THM's)
Woods
.6 methylene chloride
(+ THM's)
S. Ward Ave
Grondin
8 TCEA
(+ THM's)
Lakeward Ave
Liberty Ave
Leonakis
N/D
Moynihan
(THM's)
Ide Ave
Sherman Ave
Friendship St.

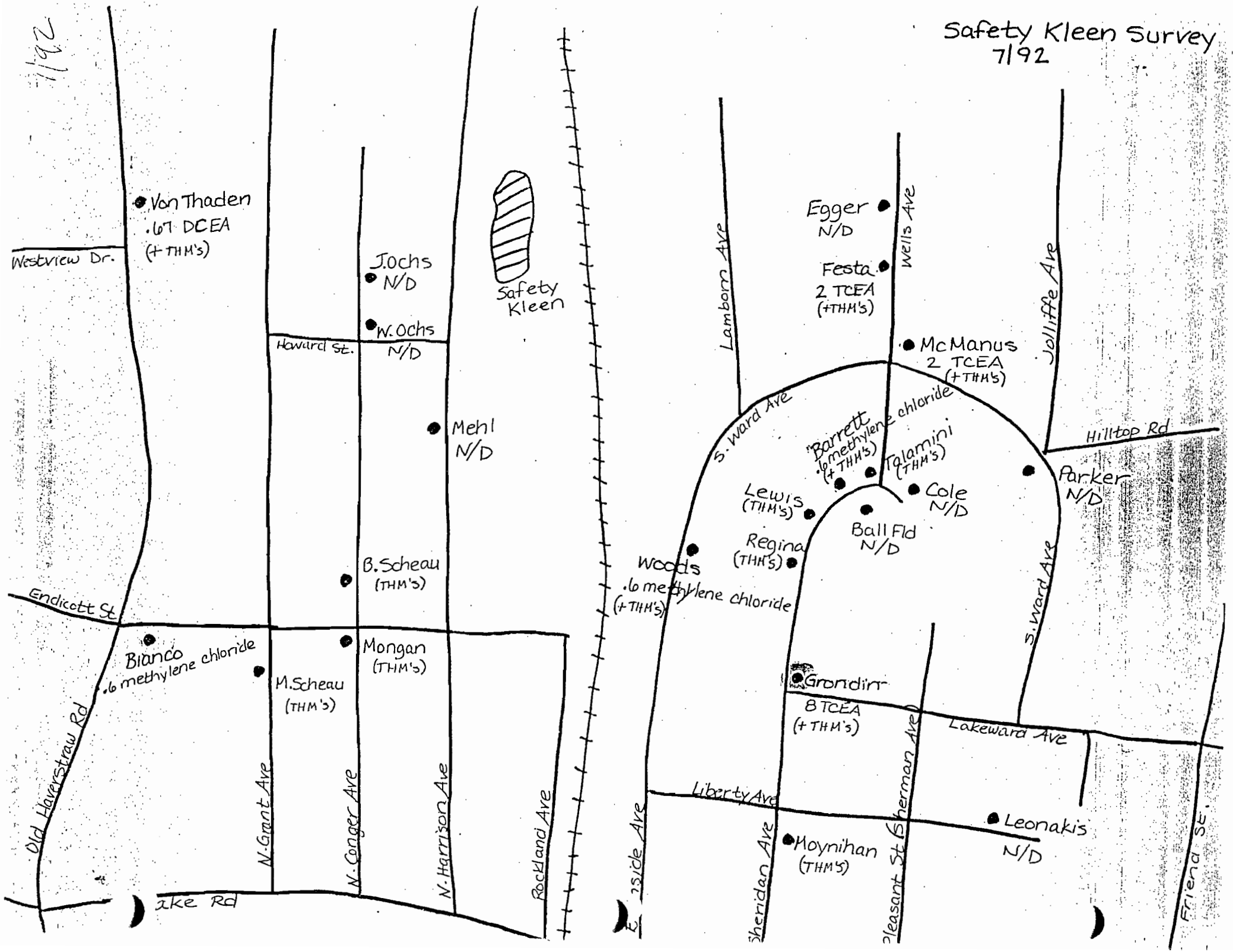

Safety Kleen Survey
7/92
7/92
Von Thaden
.67 DCEA
(+THM's)
Westview Dr.
J.Ochs
N/D
W.Ochs
N/D
Howard St.
Safety
Kleen
Mehl
N/D
B.Scheau
(THM's)
Endicott St
Bianco
.6 methylene chloride
M.Scheau
(THM's)
Mongan
(THM's)
Old Haverstraw Rd
N.Grant Ave
N.Conger Ave
N.Harrison Ave
Rockland Ave
Lake Rd
Lamborn Ave
Wells Ave
Jolliffe Ave
Egger
N/D
Festa
2 TCEA
(+THM's)
McManus
2 TCEA
(+THM's)
S.Ward Ave
Barrett
.6 methylene chloride
(+THM's)
Talamini
(THM's)
Hilltop Rd
Parker
N/D
Lewis
(THM's)
Cole
N/D
Ball Fld
N/D
Regina
(THM's)
Woods
.6 methylene chloride
(+THM's)
S.Ward Ave
Grondin
8 TCEA
(+THM's)
Lakeward Ave
Liberty Ave
Leonakis
N/D
Moynihan
(THM's)
Burnside Ave
Sheridan Ave
Pleasant St
Fisherman Ave
Friend St.

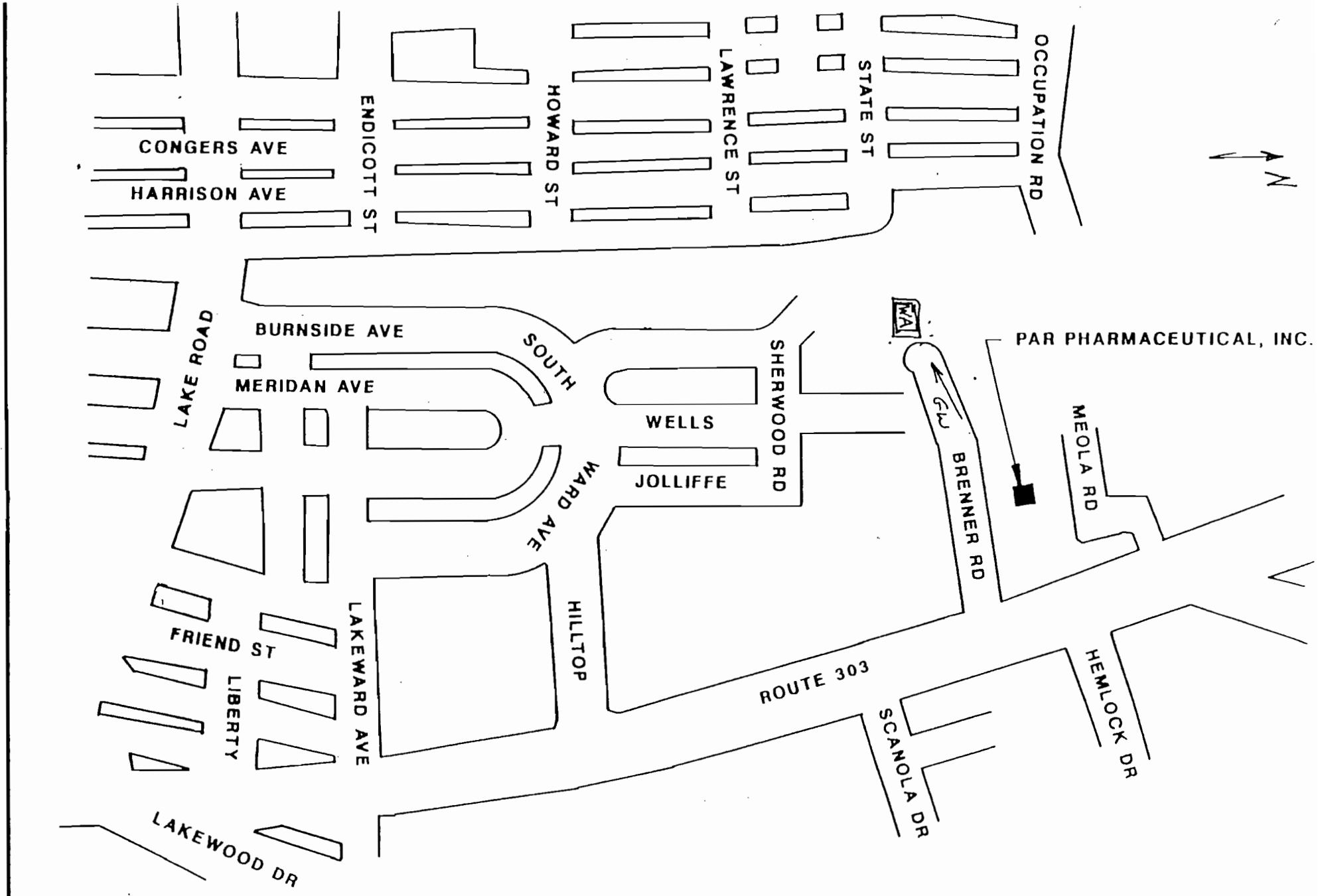


MALCOLM PIRNIE

PAR PHARMACEUTICAL, INC.

MALCOLM PIRNIE, INC

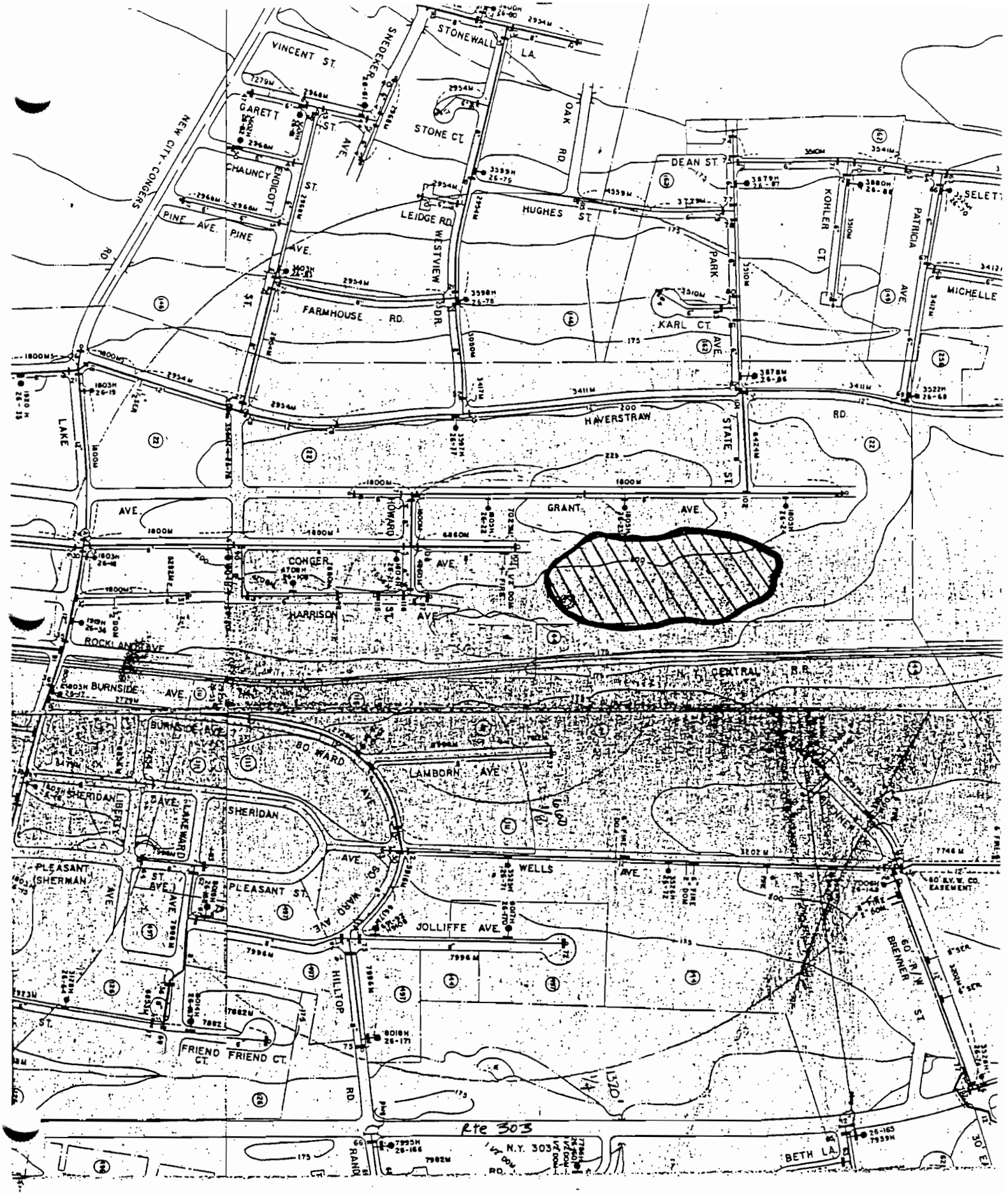

Safety Kleen Survey
7/92
Von Thaden
.67 DCEA
(+THM's)
Westview Dr.
J.Ochs
N/D
W. Ochs
N/D
Howard St.
Safety
Kleen
Mehl
N/D
B. Scheau
(THM's)
Endicott St
Bianco
.6 methylene chloride
M. Scheau
(THM's)
Mongan
(THM's)
Old Haverstraw Rd
N. Grant Ave
N. Conger Ave
N. Harrison Ave
Rockland Ave
Ike Rd
Egger
N/D
Festa
2 TCEA
(+THM's)
Wells Ave
Lamborn Ave
McManus
2 TCEA
(+THM's)
Jolliffe Ave
S. Ward Ave
Barrett
.6 methylene chloride
(+THM's)
Talamini
(THM's)
Hilltop Rd
Parker
N/D
Lewis
(THM's)
Cole
N/D
Ball Fld
N/D
Regina
(THM's)
Woods
.6 methylene chloride
(+THM's)
S. Ward Ave
Grondin
8 TCEA
(+THM's)
Lakeward Ave
Liberty Ave
Leonakis
N/D
Moynihan
(THM's)
Sheridan Ave
Pleasant St
Sherman Ave
Friend St.



MALCOLM PIRNIE

PAR PHARMACEUTICAL, INC.

MALCOLM PIRNIE, INC


VINCENT ST.
SNEDEKER AVE.
STONEWALL LA.
GARETT ST.
STONE CT.
OAK RD.
CHAUNCY ENDICOTT ST.
DEAN ST.
NEW CITY-CONGERS RD.
PINE AVE.
PINE AVE.
LEIDGE RD.
HUGHES ST.
KOHLER CT.
PATRICIA AVE.
SELETT
WESTVIEW DR.
PARK
FARMHOUSE RD.
KARL CT.
MICHELLE
LAKE
HAVERSTRAW RD.
STATE ST.
GRANT AVE.
HOWARD
CONGER
HARRISON AVE.
ROCKLAND AVE
N.Y. CENTRAL R.R.
BURNSIDE AVE.
80 WARD AVE.
LAMBORN AVE
SHERIDAN AVE.
LIBERTY
LAKEWARD
PLEASANT (SHERMAN) AVE.
PLEASANT ST.
WELLS AVE.
JOLLIFFE AVE.
HILLTOP RD.
FRIEND CT.
FRIEND ST.
BRENNER ST.
80' R.W. CO. EASEMENT
Rte 303
N.Y. 303
BETH LA.

WESTCHESTER COUNTY

Department of Laboratories & Research
Hammond House Road
Valhalla, N.Y. 10595

Environmental Laboratories
NYS-ELAP Number -10108
(914) 593-5575

Lab Number: 92-0014344

Agency: ROCKLAND COUNTY HEALTH DEPT.
Sample Location: MCMANUS
Address: 14 WELLS AVE.,CONGERS,NY
Sampling Point: KITCHEN
Collected By: KORCHAK
ON: 7/07/1992 TIME: 11:10:00
Bottle Numbers: A,B
Login Comment:

Sample Type: P
Received By: ST
ON: 7/08/1992 TIME: 14:25:58

METHOD	ANALYTES	RESULTS		REPORTED ON
	METHYLENE CHLORIDE	LT	0.50 UG/L	
	1,1,1,2-TETRACHLOROETHANE	LT	0.50 UG/L	
	1,1,2,2-TETRACHLOROETHANE	LT	0.50 UG/L	
	TETRACHLOROETHENE	LT	0.50 UG/L	
	1,1,1-TRICHLOROETHANE		1.40 UG/L	
	1,1,2-TRICHLOROETHANE	LT	0.50 UG/L	
	TRICHLOROETHENE	LT	0.50 UG/L	
	TRICHLOROFLUOROMETHANE	LT	0.50 UG/L	
	1,2,3-TRICHLOROPROPANE	LT	0.50 UG/L	
	VINYL CHLORIDE	LT	0.50 UG/L	
503/524	VOLATILE AROMATIC COMPOUNDS BY GC OR GC/MS			7/16/1992
	BENZENE	LT	0.50 UG/L	
	BROMOBENZENE	LT	0.50 UG/L	
	N-BUTYLBENZENE	LT	0.50 UG/L	
	SEC-BUTYLBENZENE	LT	0.50 UG/L	
	TERT-BUTYLBENZENE	LT	0.50 UG/L	
	CHLOROBENZENE	LT	0.50 UG/L	
	2-CHLOROTOLUENE	LT	0.50 UG/L	
	4-CHLOROTOLUENE	LT	0.50 UG/L	
	1,2-DICHLOROBENZENE	LT	0.50 UG/L	
	1,3-DICHLOROBENZENE	LT	0.50 UG/L	
	1,4-DICHLOROBENZENE	LT	0.50 UG/L	
	ETHYL BENZENE	LT	0.50 UG/L	
	HEXACHLOROBUTADIENE	LT	0.50 UG/L	

APPROVED BY: DAVID VINCI DATE APPROVED: 7/17/1992

MMENTS:

L = LESS THAN

WESTCHESTER COUNTY

Department of Laboratories & Research
Hammond House Road
Valhalla, N.Y. 10595

Environmental Laboratories
NYS-ELAP Number - 10108
(914) 593-5575

Lab Number: 92-0014344

Agency: ROCKLAND COUNTY HEALTH DEPT.
Sample Location: MCMANUS
Address: 14 WELLS AVE.,CONGERS,NY
Sampling Point: KITCHEN
Collected By: KORCHAK
ON: 7/07/1992 TIME: 11:10:00
Bottle Numbers: A,B
Login Comment:

Sample Type: P
Received By: ST
ON: 7/08/1992 TIME: 14:25:58

METHOD	ANALYTES	RESULTS		REPORTED ON
	METHYLENE CHLORIDE	LT	0.50 UG/L	
	1,1,1,2-TETRACHLOROETHANE	LT	0.50 UG/L	
	1,1,2,2-TETRACHLOROETHANE	LT	0.50 UG/L	
	TETRACHLOROETHENE	LT	0.50 UG/L	
	1,1,1-TRICHLOROETHANE		1.40 UG/L	
	1,1,2-TRICHLOROETHANE	LT	0.50 UG/L	
	TRICHLOROETHENE	LT	0.50 UG/L	
	TRICHLOROFLUOROMETHANE	LT	0.50 UG/L	
	1,2,3-TRICHLOROPROPANE	LT	0.50 UG/L	
	VINYL CHLORIDE	LT	0.50 UG/L	
503/524	VOLATILE AROMATIC COMPOUNDS BY GC OR GC/MS			7/16/1992
	BENZENE	LT	0.50 UG/L	
	BROMOBENZENE	LT	0.50 UG/L	
	N-BUTYLBENZENE	LT	0.50 UG/L	
	SEC-BUTYLBENZENE	LT	0.50 UG/L	
	TERT-BUTYLBENZENE	LT	0.50 UG/L	
	CHLOROBENZENE	LT	0.50 UG/L	
	2-CHLOROTOLUENE	LT	0.50 UG/L	
	4-CHLOROTOLUENE	LT	0.50 UG/L	
	1,2-DICHLOROBENZENE	LT	0.50 UG/L	
	1,3-DICHLOROBENZENE	LT	0.50 UG/L	
	1,4-DICHLOROBENZENE	LT	0.50 UG/L	
	ETHYL BENZENE	LT	0.50 UG/L	
	HEXACHLOROBUTADIENE	LT	0.50 UG/L	

APPROVED BY: DAVID VINCI DATE APPROVED: 7/17/1992

COMMENTS:

L = LESS THAN

WESTCHESTER COUNTY

Department of Laboratories & Research
Hammond House Road
Valhalla, N.Y. 10595

Environmental Laboratories
NYS-ELAP Number --10108
(914) 593-5575

Lab Number: 92-0014345

Agency: ROCKLAND COUNTY HEALTH DEPT.
Sample Location: FESTA
Address: 19 WELLS AVE.,CONGERS,NY
Sampling Point: KITCHEN
Collected By: KORCHAK
ON: 7/07/1992 TIME: 11:00:00
Sample Type: P
Received By: ST
ON: 7/08/1992 TIME: 14:26:34
Bottle Numbers: A,B
Login Comment:

METHOD	ANALYTES	RESULTS		REPORTED ON
	1,1-DICHLOROPROPENE	LT	0.50 UG/L	
	CIS-1,3-DICHLOROPROPENE	LT	0.50 UG/L	
	TRANS-1,3-DICHLOROPROPENE	LT	0.50 UG/L	
	METHYLENE CHLORIDE	LT	0.50 UG/L	
	1,1,1,2-TETRACHLOROETHANE	LT	0.50 UG/L	
	1,1,2,2-TETRACHLOROETHANE	LT	0.50 UG/L	
	TETRACHLOROETHENE	LT	0.50 UG/L	
	1,1,1-TRICHLOROETHANE		2.00 UG/L	
	1,1,2-TRICHLOROETHANE	LT	0.50 UG/L	
	TRICHLOROETHENE	LT	0.50 UG/L	
	TRICHLOROFLUOROMETHANE	LT	0.50 UG/L	
	1,2,3-TRICHLOROPROPANE	LT	0.50 UG/L	
	VINYL CHLORIDE	LT	0.50 UG/L	
503/524	VOLATILE AROMATIC COMPOUNDS BY GC OR GC/MS			7/16/1992
	BENZENE	LT	0.50 UG/L	
	BROMOBENZENE	LT	0.50 UG/L	
	N-BUTYLBENZENE	LT	0.50 UG/L	
	SEC-BUTYLBENZENE	LT	0.50 UG/L	
	TERT-BUTYLBENZENE	LT	0.50 UG/L	
	CHLOROBENZENE	LT	0.50 UG/L	
	2-CHLOROTOLUENE	LT	0.50 UG/L	

APPROVED BY: DAVID VINCI
DATE APPROVED: 7/17/1992
COMMENTS:

< = LESS THAN

WESTCHESTER COUNTY

partment of Laboratories & Research
mond House Road
Valhalla, N.Y. 10595

Environmental Laboratories
NYS-ELAP Number - 10108
(914) 593-5575

Lab Number: 92-0014345

Agency: ROCKLAND COUNTY HEALTH DEPT.
Sample Location: FESTA
Address: 19 WELLS AVE.,CONGERS,NY
Sampling Point: KITCHEN
Collected By: KORCHAK
ON: 7/07/1992 TIME: 11:00:00
Bottle Numbers: A,B
Login Comment:

Sample Type: P
Received By: ST
ON: 7/08/1992 TIME: 14:26:34

METHOD	ANALYTES	RESULTS	REPORTED ON
	4-CHLOROTOLUENE	LT 0.50 UG/L	
	1,2-DICHLOROBENZENE	LT 0.50 UG/L	
	1,3-DICHLOROBENZENE	LT 0.50 UG/L	
	1,4-DICHLOROBENZENE	LT 0.50 UG/L	
	ETHYL BENZENE	LT 0.50 UG/L	
	HEXACHLOROBUTADIENE	LT 0.50 UG/L	
	ISOPROPYLBENZENE	LT 0.50 UG/L	
	P-ISOPROPYLTOLUENE	LT 0.50 UG/L	
	NAPHTHALENE	LT 0.50 UG/L	
	N-PROPYLBENZENE	LT 0.50 UG/L	
	STYRENE	LT 0.50 UG/L	
	TOLUENE	LT 0.50 UG/L	
	1,2,3-TRICHLOROBENZENE	LT 0.50 UG/L	
	1,2,4-TRICHLOROBENZENE	LT 0.50 UG/L	
	1,2,4-TRIMETHYLBENZENE	LT 0.50 UG/L	
	1,3,5-TRIMETHYLBENZENE	LT 0.50 UG/L	
	P&M-XYLENE	LT 0.50 UG/L	
	O-XYLENE	LT 0.50 UG/L	
	METHYL T-BUTYL ETHER (MTBE)	LT 1.00 UG/L	
	METHYL ISOBUTYL KETONE (MIBK)	LT 1.00 UG/L	

APPROVED BY: DAVID VINCI
DATE APPROVED: 7/17/1992
COMMENTS:

T = LESS THAN

WESTCHESTER COUNTY

partment of Laboratories & Research
mmond House Road
Valhalla, N.Y. 10595

Environmental Laboratories
NYS-ELAP Number - 10108
(914) 593-5575

Lab Number: 92-0014347

Agency: ROCKLAND COUNTY HEALTH DEPT.
Sample Location: LEWIS
Address: 39 SHERIDAN AVE.,CONGERS,NY
Sampling Point: OUTSIDE TAP
Collected By: KORCHAK
ON: 7/07/1992 TIME: 10:35:00
Bottle Numbers: A,B
Login Comment:

Sample Type: P
Received By: ST
ON: 7/08/1992 TIME: 14:28:12

METHOD	ANALYTES	RESULTS		REPORTED ON
	1,1-DICHLOROPROPENE	LT	0.50 UG/L	
	CIS-1,3-DICHLOROPROPENE	LT	0.50 UG/L	
	TRANS-1,3-DICHLOROPROPENE	LT	0.50 UG/L	
	METHYLENE CHLORIDE	LT	0.50 UG/L	
	1,1,1,2-TETRACHLOROETHANE	LT	0.50 UG/L	
	1,1,2,2-TETRACHLOROETHANE	LT	0.50 UG/L	
	TETRACHLOROETHENE	LT	0.50 UG/L	
	1,1,1-TRICHLOROETHANE	LT	0.50 UG/L	
	1,1,2-TRICHLOROETHANE	LT	0.50 UG/L	
	TRICHLOROETHENE	LT	0.50 UG/L	
	TRICHLOROFLUOROMETHANE	LT	0.50 UG/L	
	1,2,3-TRICHLOROPROPANE	LT	0.50 UG/L	
	VINYL CHLORIDE	LT	0.50 UG/L	
503/524	VOLATILE AROMATIC COMPOUNDS BY GC OR GC/MS			7/16/1992
	BENZENE	LT	0.50 UG/L	
	BROMOBENZENE	LT	0.50 UG/L	
	N-BUTYLBENZENE	LT	0.50 UG/L	
	SEC-BUTYLBENZENE	LT	0.50 UG/L	
	TERT-BUTYLBENZENE	LT	0.50 UG/L	
	CHLOROBENZENE	LT	0.50 UG/L	
	2-CHLOROTOLUENE	LT	0.50 UG/L	

APPROVED BY: DAVID VINCI
DATE APPROVED: 7/17/1992
COMMENTS:

LT = LESS THAN

WESTCHESTER COUNTY

Laboratories & Research
Road
10595
Environmental
NYS ELAP Number
(914) 593-5577

Lab Number: 92-0018577

Agency: ROCKLAND COUNTY HEALTH DEPT.
Sample Location: GRONDIN
Address: 22 SHERIDAN AVE.,CONGERS,NY
Sampling Point: REAR OUTSIDE TAP
Collected By: GUIDICE
ON: 8/12/1992 TIME: 10:55:00
Bottle Numbers: GRONDIN 502
Login Comment:

Sample Type: P
Received By: ST
ON: 8/13/1992 TIME: 13:12:19

METHOD	ANALYTES	RESULTS		REPORTED ON
	METHYLENE CHLORIDE	LT 0.50	UG/L	
	1,1,1,2-TETRACHLOROETHANE	LT 0.50	UG/L	
	1,1,2,2-TETRACHLOROETHANE	LT 0.50	UG/L	
	TETRACHLOROETHENE	LT 0.50	UG/L	
	1,1,1-TRICHLOROETHANE	LT 0.50	UG/L	
	1,1,2-TRICHLOROETHANE	LT 0.50	UG/L	
	TRICHLOROETHENE	LT 0.50	UG/L	
	TRICHLOROFLUOROMETHANE	LT 0.50	UG/L	
	1,2,3-TRICHLOROPROPANE	LT 0.50	UG/L	
	VINYL CHLORIDE	LT 0.50	UG/L	
	METHYL T-BUTYL ETHER PRESENT AT 2.2 UG/L.			

PROVED BY: SANDY FINAMORE
DATE APPROVED: 8/24/1992
MMENTS:

LESS THAN

WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT --

SAMPLE ID: 922742 SAMPLE RECEIVED:92/07/10/ CHARGE: 10.00
PROGRAM: 106:BUREAU OF ENVIRONMENTAL EXPOSURE INVESTIGATION
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE:4350
POLITICAL SUBDIVISION:CLARKSTOWN COUNTY:ROCKLAND
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: CONGERS SAFETY CLEAN
DESCRIPTION:MARYANN WOODS, 50 BURNSIDE AVE., CONGERS,OUTSIDE TAP
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: 5022W:VOLATILE ORGANICS IN WATER
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 92/07/09 12:55 DATE PRINTED:92/07/24

ANALYSIS: 5022W VOLATILE ORGANICS IN WATER-EPA 502.2 (DES 310-33)
DATE PRINTED: 92/07/24 FINAL REPORT

PARAMETER	RESULT
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	0.6 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
2,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	6. MCG/L
BROMOCHLOROMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
1,1-DICHLOROPROPENE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
BENZENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TOLUENE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L

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POMONA,N.Y. 10970

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 922741 SAMPLE RECEIVED:92/07/10/ CHARGE: 10.00
PROGRAM: 106:BUREAU OF ENVIRONMENTAL EXPOSURE INVESTIGATION
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE:4350
POLITICAL SUBDIVISION:CLARKSTOWN COUNTY:ROCKLAND
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: CONGERS SAFETY CLEAN
DESCRIPTION:BARBARA BIANCO,31 ENDICOTT ST., CONGERS,NY,KITCHEN TAP
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: 5022W:VOLATILE ORGANICS IN WATER
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 92/07/09 12:43 DATE PRINTED:92/07/24

ANALYSIS: 5022W VOLATILE ORGANICS IN WATER-EPA 502.2 (DES 310-33)
DATE PRINTED: 92/07/24 FINAL REPORT

PARAMETER	RESULT
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	0.6 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
2,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	< 0.5 MCG/L
BROMOCHLOROMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
1,1-DICHLOROPROPENE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
BENZENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TOLUENE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L

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SUBMITTED BY:JOE CRUA

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 922743 SAMPLE RECEIVED:92/07/10/ CHARGE: 10.00
PROGRAM: 106:BUREAU OF ENVIRONMENTAL EXPOSURE INVESTIGATION
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE:4350
POLITICAL SUBDIVISION:CLARKSTOWN COUNTY:ROCKLAND
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: CONGERS SAFETY CLEAN
DESCRIPTION:PARKER,27 SOUTH WARD AVE., CONGERS, OUTSIDE TAP
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: 5022W:VOLATILE ORGANICS IN WATER
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 92/07/09 13:15 DATE PRINTED:92/07/24

ANALYSIS: 5022W VOLATILE ORGANICS IN WATER-EPA 502.2 (DES 310-33)
DATE PRINTED: 92/07/24 FINAL REPORT

----------PARAMETER----------	----------RESULT----------
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
2,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	< 0.5 MCG/L
BROMOCHLOROMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
1,1-DICHLOROPROPENE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
BENZENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TOLUENE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L

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POMONA,N.Y. 10970

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 922744 SAMPLE RECEIVED:92/07/10/ CHARGE: 10.00
PROGRAM: 106:BUREAU OF ENVIRONMENTAL EXPOSURE INVESTIGATION
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE:4350
POLITICAL SUBDIVISION:CLARKSTOWN COUNTY:ROCKLAND
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: CONGERS SAFETY CLEAN
DESCRIPTION:JEFF TALAMINI, 1 WELLS AVE., CONGERS KITCHEN TAP
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: 5022W:VOLATILE ORGANICS IN WATER
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 92/07/09 13:26 DATE PRINTED:92/07/24

ANALYSIS: 5022W VOLATILE ORGANICS IN WATER-EPA 502.2 (DES 310-33)
DATE PRINTED: 92/07/24 FINAL REPORT

----------PARAMETER----------	----------RESULT----------
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
2,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	0.7 MCG/L
BROMOCHLOROMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
1,1-DICHLOROPROPENE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
BENZENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TOLUENE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L

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PAGE 1 RESULTS OF EXAMINATION FINAL REPORT --

SAMPLE ID: 922745 SAMPLE RECEIVED:92/07/10/ CHARGE: 10.00
PROGRAM: 106:BUREAU OF ENVIRONMENTAL EXPOSURE INVESTIGATION
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE:4350
POLITICAL SUBDIVISION:CLARKSTOWN COUNTY:ROCKLAND
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: CONGERS SAFETY CLEAN
DESCRIPTION:BARRETT,43 SHERIDAN AVE., CONGERS, OUTSIDE TAP
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: 5022W:VOLATILE ORGANICS IN WATER
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 92/07/09 13:43 DATE PRINTED:92/07/24

ANALYSIS: 5022W VOLATILE ORGANICS IN WATER-EPA 502.2 (DES 310-33)
DATE PRINTED: 92/07/24 FINAL REPORT

----------PARAMETER----------	----------RESULT----------
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	0.6 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
2,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	1. MCG/L
BROMOCHLOROMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
1,1-DICHLOROPROPENE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
BENZENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TOLUENE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L

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RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 922746 SAMPLE RECEIVED:92/07/10/ CHARGE: 10.00
PROGRAM: 106:BUREAU OF ENVIRONMENTAL EXPOSURE INVESTIGATION
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE:4350
POLITICAL SUBDIVISION:CLARKSTOWN COUNTY:ROCKLAND
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: CONGERS SAFETY CLEAN
DESCRIPTION:COLE,40 SHERMAN AVE., CONGERS, OUTSIDE TAP
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: 5022W:VOLATILE ORGANICS IN WATER
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 92/07/09 13:32 DATE PRINTED:92/07/22

ANALYSIS: 5022W VOLATILE ORGANICS IN WATER-EPA 502.2 (DES 310-33)
DATE PRINTED: 92/07/22 FINAL REPORT

----------PARAMETER----------	----------RESULT----------
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
2,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	< 0.5 MCG/L
BROMOCHLOROMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
1,1-DICHLOROPROPENE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
BENZENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TOLUENE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L

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POMONA,N.Y. 10970

RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 922747 SAMPLE RECEIVED:92/07/10/ CHARGE: 10.00
PROGRAM: 106:BUREAU OF ENVIRONMENTAL EXPOSURE INVESTIGATION
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE:4350
POLITICAL SUBDIVISION:CLARKSTOWN COUNTY:ROCKLAND
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: CONGERS SAFETY CLEAN
DESCRIPTION:ANTHONY REGINA, 35 SHERIDAN AVE., CONGERS, KITCHEN TAP
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: 5022W:VOLATILE ORGANICS IN WATER
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 92/07/09 14:00 DATE PRINTED:92/07/22

ANALYSIS: 5022W VOLATILE ORGANICS IN WATER-EPA 502.2 (DES 310-33)
DATE PRINTED: 92/07/22 FINAL REPORT

PARAMETER	RESULT
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
2,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	4. MCG/L
BROMOCHLOROMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
1,1-DICHLOROPROPENE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
BENZENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TOLUENE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L

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POMONA,N.Y. 10970

SUBMITTED BY:JOE CRUA

RESULTS OF EXAMINATION FINAL REPORT

ID: 922748 SAMPLE RECEIVED:92/07/10/ CHARGE: 10.00
AM: 106:BUREAU OF ENVIRONMENTAL EXPOSURE INVESTIGATION
CE ID: DRAINAGE BASIN: GAZETTEER CODE:4350
ITICAL SUBDIVISION:CLARKSTOWN COUNTY:ROCKLAND
ATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: CONGERS SAFETY CLEAN
DESCRIPTION:GRONDIN, 22 SHERIDAN AVE., CONGERS, OUTSIDE TAP
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: 5022W:VOLATILE ORGANICS IN WATER
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 92/07/09 14:05 DATE PRINTED:92/07/22

ANALYSIS: 5022W VOLATILE ORGANICS IN WATER-EPA 502.2 (DES 310-33)
DATE PRINTED: 92/07/22 FINAL REPORT

PARAMETER	RESULT
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	0.6 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
2,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	4. MCG/L
BROMOCHLOROMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	8. MCG/L
1,1-DICHLOROPROPENE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
BENZENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TOLUENE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L

**** CONTINUED ON NEXT PAGE ****

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DIRECTOR OF ENVIRONMENTAL HEALTH
ROCKLAND COUNTY HEALTH DEPT.
SANITORIUM RD. SUBMITTED BY:JOE CRUA
POMONA,N.Y. 10970

NEW YORK STATE DEPARTMENT OF HEALTH 130
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

RESULTS OF EXAMINATION FINAL REPORT

922749 SAMPLE RECEIVED:92/07/10/ CHARGE: 10.00
106:BUREAU OF ENVIRONMENTAL EXPOSURE INVESTIGATION
ID: DRAINAGE BASIN: GAZETTEER CODE:4350
CAL SUBDIVISION:CLARKSTOWN COUNTY:ROCKLAND
UDE: LONGITUDE: Z DIRECTION:
TION: CONGERS SAFETY CLEAN
CRIPTION:MOYNIHAN, 18 SHERIDAN AVE., CONGERS, OUTSIDE TAP
EPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
EST PATTERN: 5022W:VOLATILE ORGANICS IN WATER
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
TIME OF SAMPLING: 92/07/09 14:15 DATE PRINTED:92/07/22

ANALYSIS: 5022W VOLATILE ORGANICS IN WATER-EPA 502.2 (DES 310-33)
DATE PRINTED: 92/07/22 FINAL REPORT

PARAMETER	RESULT
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	< 0.5 MCG/L
1,1-DICHLOROETHENE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
2,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	19. MCG/L
BROMOCHLOROMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
1,1-DICHLOROPROPENE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
BENZENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
BROMODICHLOROMETHANE	4. MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TOLUENE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	0.8 MCG/L

**** CONTINUED ON NEXT PAGE ****

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DIRECTOR OF ENVIRONMENTAL HEALTH
ROCKLAND COUNTY HEALTH DEPT.
SANITORIUM RD.
POMONA,N.Y. 10970

SUBMITTED BY:JOE CRUA

GROUNDWATER TECHNOLOGY

Groundwater Technology, Inc.
1245 Kings Road, Schenectady, NY 12303
Tel: (518) 370-5631 Fax: (518) 370-5864

SAMPLING VISIT/RCRA FACILITY INVESTIGATION REPORT

SAFETY-KLEEN SERVICE CENTER
68 NORTH HARRISON AVENUE
CONGERS, NEW YORK 10920

US EPA I.D. NO: NYD 000708164

April 14, 1994

Submitted to:

Keith M. Marcott, CHMM, CPG
Senior Project Manager - Remediation
SAFETY KLEEN CORPORATION
P.O. Box 430
Hagaman, New York 12086

GROUNDWATER TECHNOLOGY, INC.
National Industry Division
Written/Submitted By

Deborah M. Osterhoudt
Associate Geologist

Teresa M. Misiolek
Site Manager
Lead Hydrogeologist

GROUNDWATER TECHNOLOGY, INC.
National Industry Division
Reviewed/Approved By:

Joseph L. Basile, Jr.
Senior Project Manager
Hydrogeologist

Cymantha Diaz Liakos, CPG, RPG
Customer Program Manager
Project Hydrogeologist

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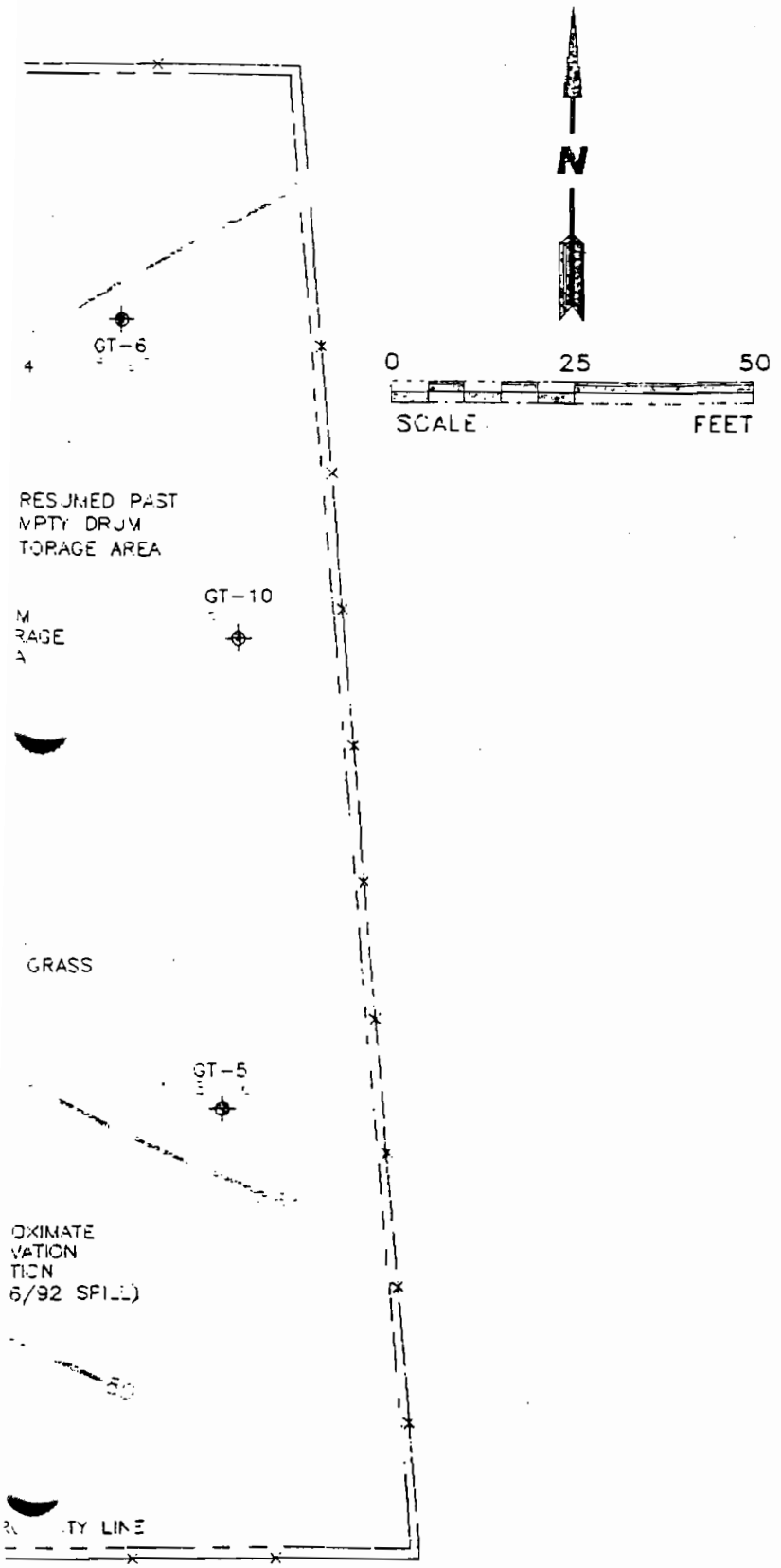
1.0 INTRODUCTION

1.1 Background

Safety-Kleen Corporation (Safety-Kleen) has operated a service center located at 68 North Harrison Avenue, Congers, New York since approximately 1970 (Figure 1, Site Location Map). In 1980, the facility filed a RCRA Facility Part A permit application with the United Stated Environmental Protection Agency (USEPA), and was granted Interim Status to operate a hazardous waste storage facility from the leased property. In 1988, Safety-Kleen submitted the required RCRA Facility Part B permit application in order to secure final operating status. Subsequently in 1992, Safety-Kleen withdrew the Part B permit application, made plans to close the facility and move to a new location. The New York State Department of Environmental Conservation (NYS DEC) had however already issued the Part B Permit in draft form.

During the development of the Part B Permit, the NYS DEC identified several Areas of Concern (AOCs)/Solid Waste Management Units (SWMUs) on-site and required Safety-Kleen to investigate them in order to evaluate if any residual impacts were present at these locations (Module III, Section A(3)(C) of the Draft Part B permit). The list of AOCs and SWMUs includes both previously operated and in-service (at the time the Draft Permit was issued) Hazardous Waste Management Units (HWMUs), an historic empty drum storage area, and non-RCRA regulated underground storage tank locations (used for storage of virgin mineral spirits). A brief description of the AOCs/SWMUs/HWMU's, and their current RCRA closure status is presented as Table 1.

As presented in the March 6, 1987 document entitled: "Proposed Work Plan, Groundwater Contamination Assessment" prepared by Wang Engineering for Safety-Kleen, three underground storage tanks (UG-3, UG-4, and UG-5) were removed in December, 1986. Further, in the winter of 1991 and the spring of 1992 the remaining underground storage tanks on-site (UG-1 and UG-2) were removed. For further details regarding the HWMU and non-RCRA regulated tank closures, please refer to the reports entitled: "Certified Partial Closure Report", dated March 10, 1992 (UG-1 tank closure), and the "Tank Closure Certification Report" dated June 12, 1992 (UG-2 virgin mineral spirits tank closure) prepared by Groundwater Technology, Inc. (GTI). In March 1993, the last HWMUs remaining on-site (Return/Fill Station, Container Storage Area, IB-Metal Shelters) were decommissioned in accordance with the



LEGEND

- MONITORING WELL (by GTI)
- RECOVERY WELL (by GTI)
- SOIL BORING (by GTI)
- SOIL BORING (by OTHERS)
- ABANDONED MONITORING WELL
- ADDITIONAL SOIL BORING FOR CPS SAMPLING
- GROUNDWATER ELEVATION (feet)
- INFERRED GROUNDWATER CONTOUR (feet)
- INFERRED GROUNDWATER FLOW DIRECTION

MONITORING DATE: 12/29/93

NOTE: *GT-7 NOT INCLUDED IN CONTOURING

- SANITARY SEWER LINE (6" PVC PIPE, 3' BELOW GRADE)
- WATER SERVICE LINE (3/4" COPPER PIPE, 3' BELOW GRADE)
- APPROXIMATE LOCATION OF WATER SERVICE LINE (3/4" COPPER PIPE, 3' BELOW GRADE)
- GAS LINE
- APPROXIMATE LOCATION OF SANITARY SEWER LINE LEADING TO SANITARY SEWER CLEAN OUT TRAP

UTILITY LOCATIONS ARE APPROXIMATE

BASE MAP SOURCES:

1. SAFETY-KLEEN SITE PLAN DRAWING NO. 211801-0001-00
2. TYREE ENVIRONMENTAL TECHNOLOGIES "SITE PLAN" DATED 3/25/92
3. WANG ENGINEERING REPORT, EXHIBIT 1 DATED 3/6/87

FORMER UST KEY

UG-1: FORMER 15K WASTE MS TANK*
UG-2: FORMER 12K CLEAN MS TANK
UG-3: FORMER 8K WASTE MS TANK
UG-4: FORMER 10K CLEAN MS TANK
UG-5: FORMER 1K SLUDGE TANK
MS: MINERAL SPIRITS

* CLOSED CLEAN - 4/17/92

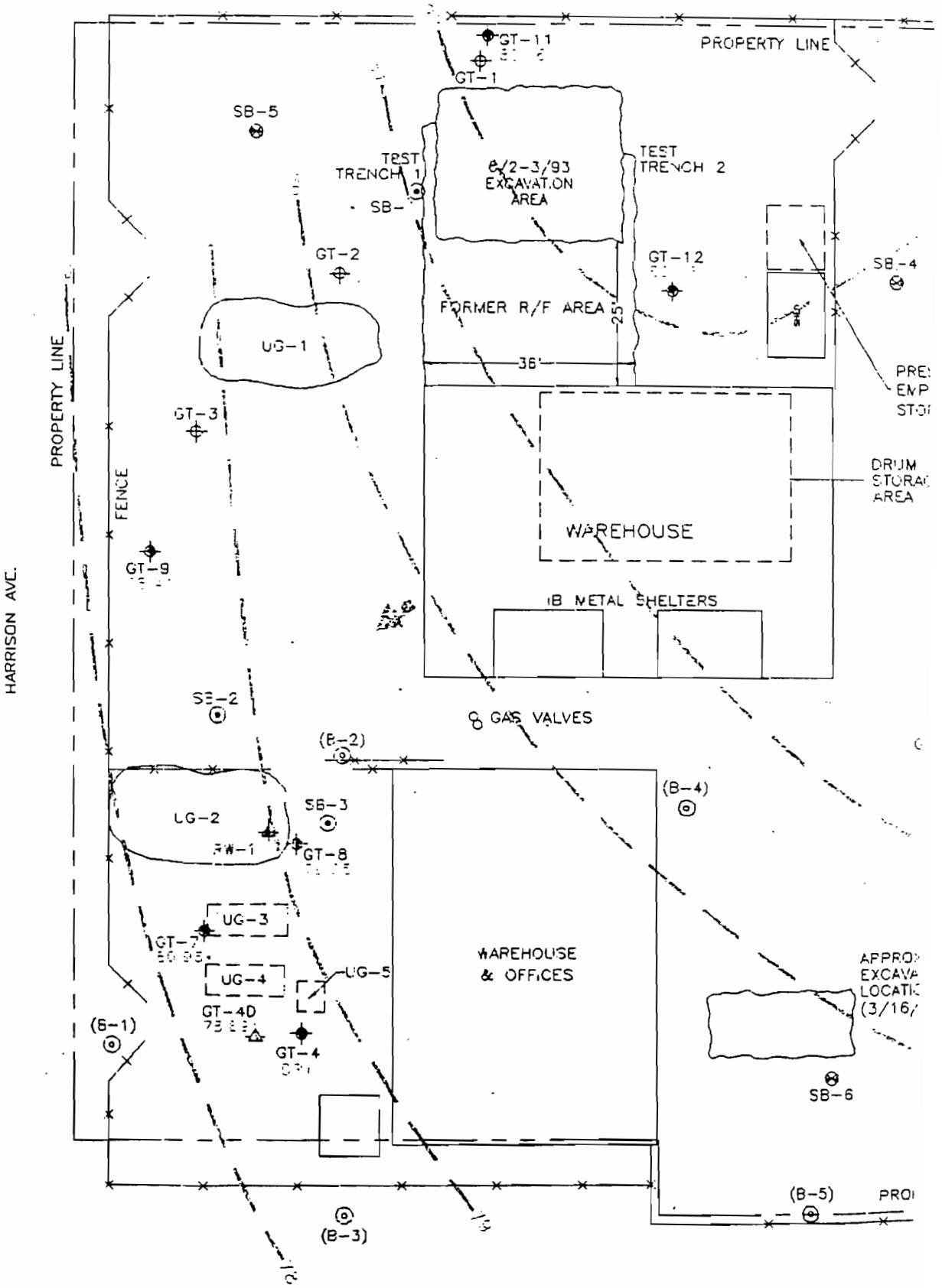
GROUNDWATER TECHNOLOGY
1245 KINGS ROAD
SCHENECTADY, NY 12303
(518) 370-5631

REV. NO.:	DRAWING DATE:	ACAD FILE:
	3/22/94	GWDEC93

GROUNDWATER GRADIENT MAP

CLIENT:	PM:
SAFETY-KLEEN CORPORATION	JLB
LOCATION: 68 NORTH HARRISON AVE CONGERS, NEW YORK	PE/PG: TMM

DESIGNED:	DETAILED:	PROJECT NO.:	FIGURE:
TMM	DEO	04100-1227	6


PROPERTY LINE
GT-11
GT-1
SB-5
TEST TRENCH 1
SB-1
6/2-3/93 EXCAVATION AREA
TEST TRENCH 2
GT-2
GT-12
SB-4
FORMER R/F AREA
25'
36'
UG-1
PROPERTY LINE
FENCE
GT-3
DRUM STORAGE AREA
WAREHOUSE
GT-9
18 METAL SHELTERS
HARRISON AVE.
SB-2
8 GAS VALVES
(B-2)
(B-4)
LG-2
SB-3
RW-1
GT-8
UG-3
GT-7
WAREHOUSE & OFFICES
UG-4
UG-5
GT-4D
(B-1)
GT-4
SB-6
(B-5)
(B-3)

and in Figure 6. Depth to water ranged from approximately 12 to 21 ft below the surveyed top-of-casings. LPH was detected at the location of GT-7 (0.46 feet). As previously stated, LPH have been found at this location since January, 1993. The LPH thickness has varied historically from 0.01 feet (7/93) to 1.7 feet (1/93). During each monthly site visit, the LPH is manually bailed into a Safety-Kleen provided drum for future disposal by Safety-Kleen.

The gauging data indicate that groundwater flow across the site is generally towards the southwest. The groundwater elevations on site could not be compared with the elevation of the intermittent creek located along the eastern property boundary due to its inaccessibility. The average hydraulic gradient across the site was approximately two percent. Please note that ICM pumping system was not operating during the December, 1993 gauging event and therefore it appears that the December 29, 1993 gauging data represent the natural groundwater flow regime at that time. Comparison of the recently determined groundwater flow direction (to southwest) with the May, 1992 data (to east) suggests that seasonal fluctuations may occur at the site.

In order to further evaluate the potential for seasonal groundwater fluctuations on site, a review of the general topography of the area was performed. The analysis of the USGS Haverstraw quadrangle revealed that the site is situated essentially atop a small hill located between DeForest Lake and the Hudson River. Therefore, the regional groundwater flow in the area of the site may be seasonally affected by the water level in these water bodies.

The results of the December 30, 1993 and January 7, 1994 sampling event are summarized in Table 5. The complete laboratory analytical reports are included in Appendix G.

As indicated in Table 4, only two target compounds (Trichlorofluoromethane and Bromomethane) were detected in the soil samples by EPA Method 8010. The detected concentrations did not exceed the soil CPS values for these compounds. No target compounds were detected in soils by EPA Method 8020. Please note that source water (from the facility municipal water supply) and equipment decontamination blanks collected during the soil boring installation program indicated the presence of Chloromethane, at the concentrations of 0.0043 and 0.0049 ppm, respectively. However, this compound was not detected in the analyzed soil samples.

Various metals were detected at several soil boring locations. The reported concentrations were compared to the concentrations detected at the designated background location (GT-9 2'-4') and to the common ranges of metal concentrations found in soils as published by the USGS and USEPA (please see reference in Table 4). Shaded cells in Table 3 denote concentrations found above the background level, as detected at GT-9 (2'-4'). Concentrations of selected metals detected were similar to background concentrations, and all metal concentrations were within the common ranges published by both USGS and USEPA, with the exception of Arsenic which was detected at a concentration within the USEPA-published range.

3.3 Closure Performance Standards

The results of soil sampling and TCLP leachate analysis which were performed to determine the site-specific CPS for TPH in soils, were compared to PCL soil and groundwater sampling results. The matrix of detected compounds is presented in Appendix E. As indicated in Appendix E, no correlation was observed between the amount of mineral spirit/TPH detected in soils and concentrations of target compounds in TCLP leachate. At the February 14, 1994 meeting between NYS DEC and Safety-Kleen, it was decided that the method described in Section 2.3 would not produce a reliable CPS for TPH. Therefore, there will be no CPS for TPH in soils, rather CPS values have to be met for each individual target compound. Currently, the soil CPSs are being evaluated by the NYSDOH.

3.4 Site Hydrogeology and Groundwater Sampling Results

The aquifer on site is composed of fine sand and silt/till. The aquifer parameters calculated based upon the pump test previously performed on site (transmissivity of 130-250 gpd/ft) are typical for these types of soils. The results of the December 29, 1993 groundwater gauging round are presented in Appendix C

Table 1
Soil Gas Analytical Parameters
Wilsonart - Congers, New York
October 21, 1998

Compound	Quant. Limit
dichlorodifluoromethane	1ng/samp.
chloromethane	1ng/samp.
vinyl chloride	1ng/samp.
bromomethane	1ng/samp.
chloroethane	1ng/samp.
trichlorofluoromethane	1ng/samp.
1,1-dichloroethene	1ng/samp.
methylene chloride	1ng/samp.
methyl-t-butyl ether	1ng/samp.
trans 1,2-dichloroethene	1ng/samp.
cis-1,2-dichloroethene	1ng/samp.
chloroform	1ng/samp.
bromochloromethane	1ng/samp.
1,1,1-trichloroethane	1ng/samp.
1,1-dichloropropene	1ng/samp.
carbon tetrachloride	1ng/samp.
1,1-dichloroethane	1ng/samp.
2,2-dichloropropane	1ng/samp.
1,2-dichloroethane	1ng/samp.
benzene	1ng/samp.
trichloroethene	1ng/samp.
1,2-dichloropropane	1ng/samp.
bromodichloromethane	1ng/samp.
dibromomethane	1ng/samp.
trans-1,3-dichloropropene	1ng/samp.
toluene	1ng/samp.
cis-1,3-dichloropropene	1ng/samp.
1,1,2-trichloroethane	1ng/samp.
1,2-dibromoethane	1ng/samp.
1,3-dichloropropane	1ng/samp.

Compound	Quant. Limit
tetrachloroethene	1ng/samp.
dibromochloromethane	1ng/samp.
chlorobenzene	1ng/samp.
ethylbenzene	1ng/samp.
1,1,1,2-tetrachlorethane	1ng/samp.
m,p-xylene	1ng/samp.
o-xylene	1ng/samp.
styrene	1ng/samp.
bromoform	1ng/samp.
isopropylbenzene	1ng/samp.
1,1,2,2-tetrachlorethane	1ng/samp.
1,2,3-trichloropropane	1ng/samp.
n-propylbenzene	1ng/samp.
bromobenzene	1ng/samp.
1,3,5-trimethylbenzene	1ng/samp.
2-chlorotoluene	1ng/samp.
4-chlorotoluene	1ng/samp.
tert-butybenzene	1ng/samp.
1,2,4-trimethylbenzene	1ng/samp.
sec-butylbenzene	1ng/samp.
p-isopropyltoluene	1ng/samp.
1,3-dichlorobenzene	1ng/samp.
1,4-dichlorobenzene	1ng/samp.
n-butylbenzene	1ng/samp.
1,2-dichlororbenzene	1ng/samp.
1,2-dibromo-3-chloropropane	1ng/samp.
1,2,4-trichlorobenzene	1ng/samp.
hexachlorbutadiene	1ng/samp.
naphalene	1ng/samp.
1,2,3-trichlorobenzene	1ng/samp.

Table 1
Soil Gas Analytical Parameters
Wilsonart - Congers, New York
October 21, 1998

Compound	Quant. Limit
dichlorodifluoromethane	1ng/samp.
chloromethane	1ng/samp.
vinyl chloride	1ng/samp.
bromomethane	1ng/samp.
chloroethane	1ng/samp.
trichlorofluoromethane	1ng/samp.
1,1-dichloroethene	1ng/samp.
methylene chloride	1ng/samp.
methyl-t-butyl ether	1ng/samp.
trans 1,2-dichloroethene	1ng/samp.
cis-1,2-dichloroethene	1ng/samp.
chloroform	1ng/samp.
bromochloromethane	1ng/samp.
1,1,1-trichloroethane	1ng/samp.
1,1-dichloropropene	1ng/samp.
carbon tetrachloride	1ng/samp.
1,1-dichloroethane	1ng/samp.
2,2-dichloropropane	1ng/samp.
1,2-dichloroethane	1ng/samp.
benzene	1ng/samp.
trichloroethene	1ng/samp.
1,2-dichloropropane	1ng/samp.
bromodichloromethane	1ng/samp.
dibromomethane	1ng/samp.
trans-1,3-dichloropropene	1ng/samp.
toluene	1ng/samp.
cis-1,3-dichloropropene	1ng/samp.
1,1,2-trichloroethane	1ng/samp.
1,2-dibromoethane	1ng/samp.
1,3-dichloropropane	1ng/samp.

Compound	Quant. Limit
tetrachloroethene	1ng/samp.
dibromochloromethane	1ng/samp.
chlorobenzene	1ng/samp.
ethylbenzene	1ng/samp.
1,1,1,2-tetrachlorethane	1ng/samp.
m,p-xylene	1ng/samp.
o-xylene	1ng/samp.
styrene	1ng/samp.
bromoform	1ng/samp.
isopropylbenzene	1ng/samp.
1,1,2,2-tetrachlorethane	1ng/samp.
1,2,3-trichloropropane	1ng/samp.
n-propylbenzene	1ng/samp.
bromobenzene	1ng/samp.
1,3,5-trimethylbenzene	1ng/samp.
2-chlorotoluene	1ng/samp.
4-chlorotoluene	1ng/samp.
tert-butybenzene	1ng/samp.
1,2,4-trimethylbenzene	1ng/samp.
sec-butylbenzene	1ng/samp.
p-isopropyltoluene	1ng/samp.
1,3-dichlorobenzene	1ng/samp.
1,4-dichlorobenzene	1ng/samp.
n-butylbenzene	1ng/samp.
1,2-dichlororbenzene	1ng/samp.
1,2-dibromo-3-chloropropane	1ng/samp.
1,2,4-trichlorobenzene	1ng/samp.
hexachlorbutadiene	1ng/samp.
naphalene	1ng/samp.
1,2,3-trichlorobenzene	1ng/samp.

Table 2
Summary of Ground Water Data
Wilsonart - Congers, New York
October 21, 1998

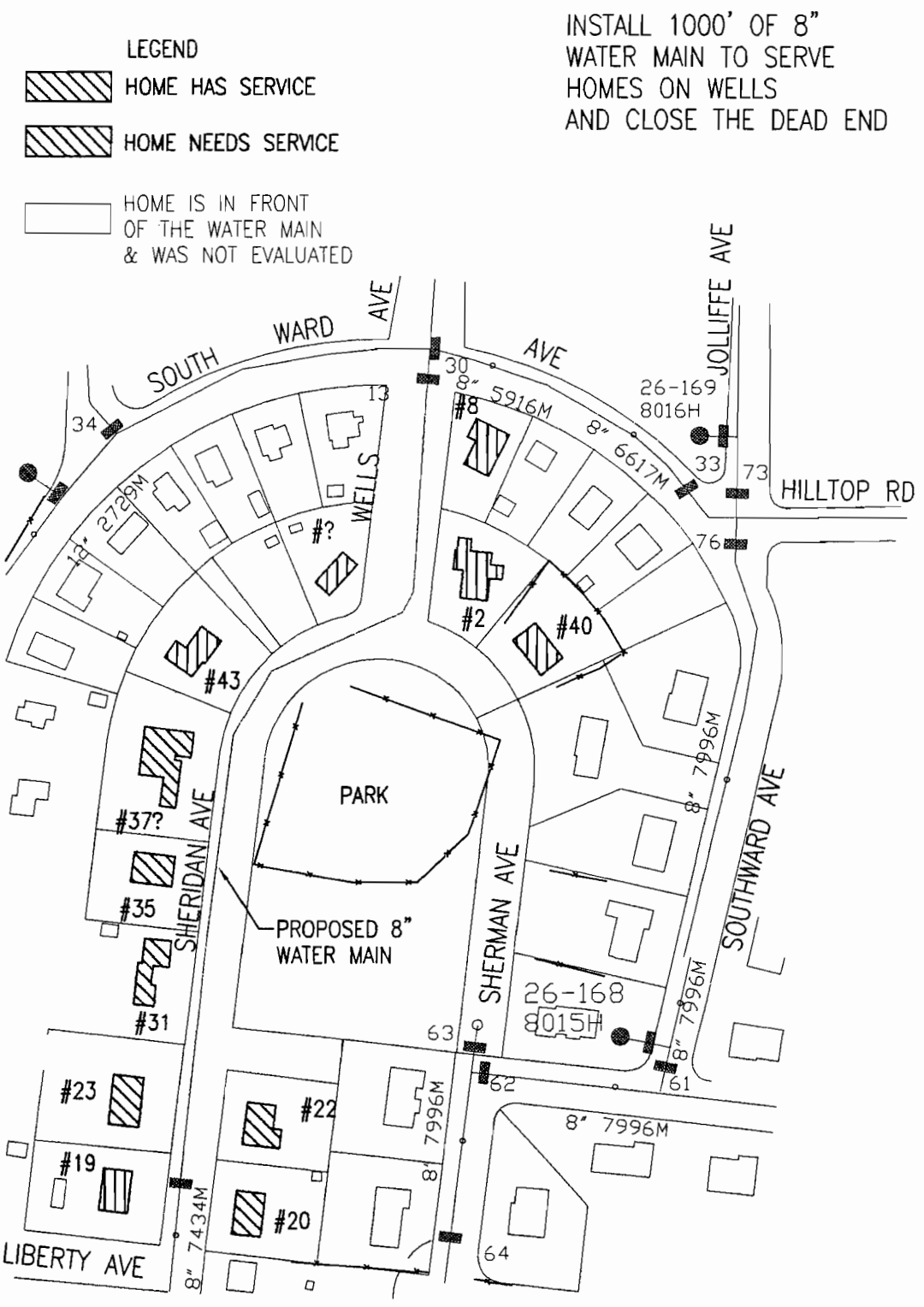
Compound	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-6 Field Dup.
1,1-dichloroethene	6	<5	<5	<5	<5	<5	<5
1,1-dichloroethane	6	<5	<5	<5	<5	7	7
1,1,1-trichloroethane	<5	12	63	<5	20	<5	<5
trichloroethene	<5	95	494	<5	160	9	8

Note: All results expressed in ug/l = parts per billion (ppb).

Table 3
Ground Water Elevations
Wilsonart - Congers, New York
October 21, 1998

Well ID	Ground Water Elevation*
MW-1	168.61
MW-2	168.68
MW-3	168.38
MW-4	167.53
MW-5	168.86
MW-6	167.90

* Ground water elevations presented in feet above mean sea level.



United Water New York
360 West Nyack Rd West Nyack, NY 10994

PROPOSED MAIN EXTENSION TO SERVE HOMES ON SHERIDAN AVE

CAD FILE NO	Drawn By:	Date	Scale
	PM	1/31/01	NO SCALE

United Water

Table
Summary of Potential Off-Site Sources
Wilsonart International, Inc.
Congers, New York

Location (Distance, Direction)	Site	Compound of Concern	Status	Database Reference
0.3 mile southwest, downgradient	Safety-Kleen Corp. (NYS00708164)	Hazardous Waste	Active	RCRA-TSD Rockland County Hazardous Waste Site
0.2 mile east, upgradient	Hitachi Seiki USA, Inc. (NYD061947487)	LQG of Hazardous Waste	Active	RCRIS-GEN Rockland County Hazardous Waste Site
0.23 mile south-southeast, upgradient	Lester Associates, Inc. (NYR000031526)	SQR-Hazardous Waste	Active	RCRIS-GEN
0.25 mile east, upgradient	Materials Research Corp. (NYD981140809)	LQG - Hazardous Waste	Active	RCRIS-GEN Rockland County Hazardous Waste Site
0.1 mile northeast, upgradient	PAR Pharmaceutical	LQG - Hazardous Waste	Active	RCRIS-GEN
0.1 mile northeast, upgradient	PAR Pharmaceutical (Case #: 252658)	Dichloromethane (109-gallon release)	Active	ERNS
0.1 mile northeast, upgradient	PAR Pharmaceutical (Spill #: 9311181)	Unknown petroleum (650-gallon release)	Active	SPILLS
0.3 mile northeast, upgradient	Brenner Drive/Rte 303 (Spill #: 960538)	"Unknown" hazardous materials (60-gallons)	Active	SPILLS
0.2 mile southwest, downgradient	Safety-Kleen Corp. (Spill #: 9012176)	Mineral Spirits (8-gallons)	Closed	SPILLS
0.3 mile southwest, downgradient	Safety-Kleen Corp. (Spill #: 9101606)	Hazardous Material (10-gallons)	Active	SPILLS
0.3 mile southwest, downgradient	Safety-Kleen Corp. (Spill #: 9010870)	"Unknown" material (186-gallons)	Closed	SPILLS
0.3 mile southwest, downgradient	Safety-Kleen Corp. (Spill #: 9012013)	"Unknown" material (19-gallons)	Closed	SPILLS

Table
Summary of Potential Off-Site Sources
Wilsonart International, Inc.
Congers, New York

Location (Distance, Direction)	Site	Compound of Concern	Status	Database Reference
0.3 mile southwest, downgradient	Safety-Kleen Corp. (Spill #: 9201784)	"Unknown" material ("0"-gallons)	Active	SPILLS
0.3 mile southwest, downgradient	Safety-Kleen Corp. (Spill #: 9207040)	"Hazardous" material ("0"-gallons)	Closed	SPILLS
0.3 mile southwest, downgradient	Safety-Kleen Corp. (Spill #: 9205786)	"Unknown" material ("0"-gallons)	Closed	SPILLS
0.3 mile southwest, downgradient	Safety-Kleen Corp. (Spill #: 9112731)	"Unknown" material (10.0-gallons)	Closed	SPILLS
0.3 mile southwest, downgradient	Safety-Kleen Corp. (Spill #: 9104069)	"Hazardous" material (25-gallons)	Active	SPILLS
0.1 mile northeast, upgradient	CBS 3 000258/AST	Methylene Chloride (1,500-gallons)	Active	UST
0.3 mile southwest, downgradient	Safety-Kleen Corp. (Spill Case: 9201784)	"Unknown" material	Active	LUST
1/4 mile northwest of Blauvelt State Park	Clarkstown Landfill	TCE, PCE (Impacts to GW & SW)	Remedial Construction (Complete)	List of Inactive Hazardous Waste Site Registry
Pearl River (not close)	Lederle Lab	Chlorinated Solvents (Impacts to GW & SW)	seeking RCRA Permit	List of Inactive Hazardous Waste Site Registry
1/4 mile northwest of Blauvelt State Park	ORU	1,1,1-TCA (Impacts to bedrock GW)	GW Monitoring	List of Inactive Hazardous Waste Site Registry

Table
Summary of Potential Off-Site Sources
Wilsonart International, Inc.
Congers, New York

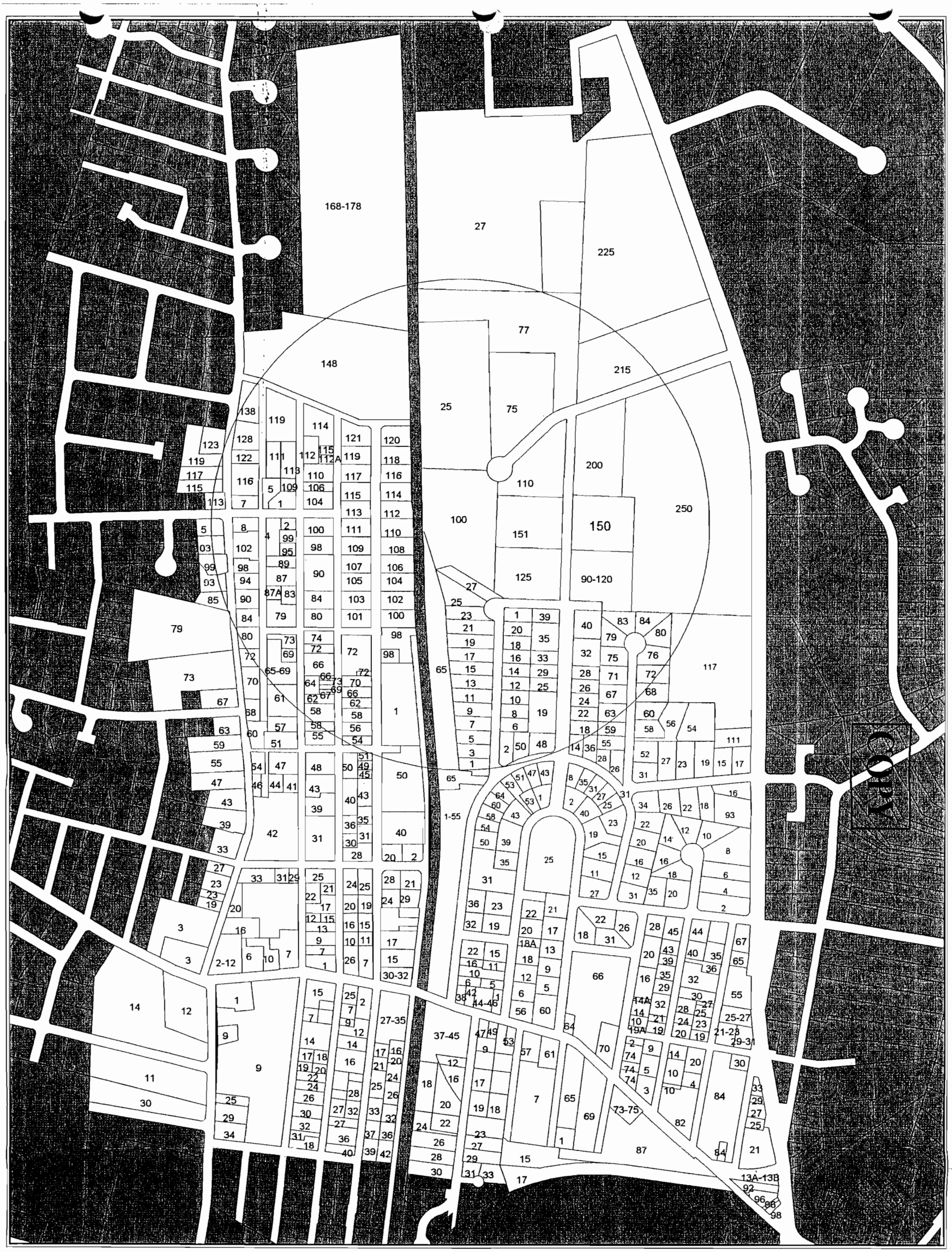
Location (Distance, Direction)	Site	Compound of Concern	Status	Database Reference
Suffern (not close)	Suffern Well Field	1,1,1-TCA (Impacts to GW)	O&M	List of Inactive Hazardous Waste Site Registry
500 feet west of Blauvelt State Park	Xerox	TCE, PCE, 1,1,1-TCA (Impacts to GW, SW & Soil)	Remedial Action (Active)	List of Inactive Hazardous Waste Site Registry
1/4 mile northwest of Blauvelt State Park	Grant Hardware	TCE, PCE (Impacts to GW, SW & Soil)	IRM (Active)	List of Inactive Hazardous Waste Site Registry
Maple Avenue, Spring Valley	Airmont Cemetery	1,1,1-TCA (Impacts to GW)	GW Monitoring	List of Inactive Hazardous Waste Site Registry
15 West Street, Spring Valley	COSCO (Spring Valley Well Field)	TCE, PCE (Impacts to bedrock GW)	Remedial Action (In Progress)	List of Inactive Hazardous Waste Site Registry
33 Route 304, Nanuet	Swivelier Co.	TCE (Impacts to GW, SW & Sed)	Removal Action (Active)	List of Inactive Hazardous Waste Site Registry
1/4 mile northwest of Blauvelt State Park	Chromalloy	TCE (Impacts to GW)	Consent Order RI/FS is complete	List of Inactive Hazardous Waste Site Registry
Stony Point (north of Site)	Gabriel Manufacturing	1,1,1-TCA & 1,1-DCE (Impacts to GW)		List of Inactive Hazardous Waste Site Registry

Table
Summary of Potential Off-Site Sources
Wilsonart International, Inc.
Congers, New York

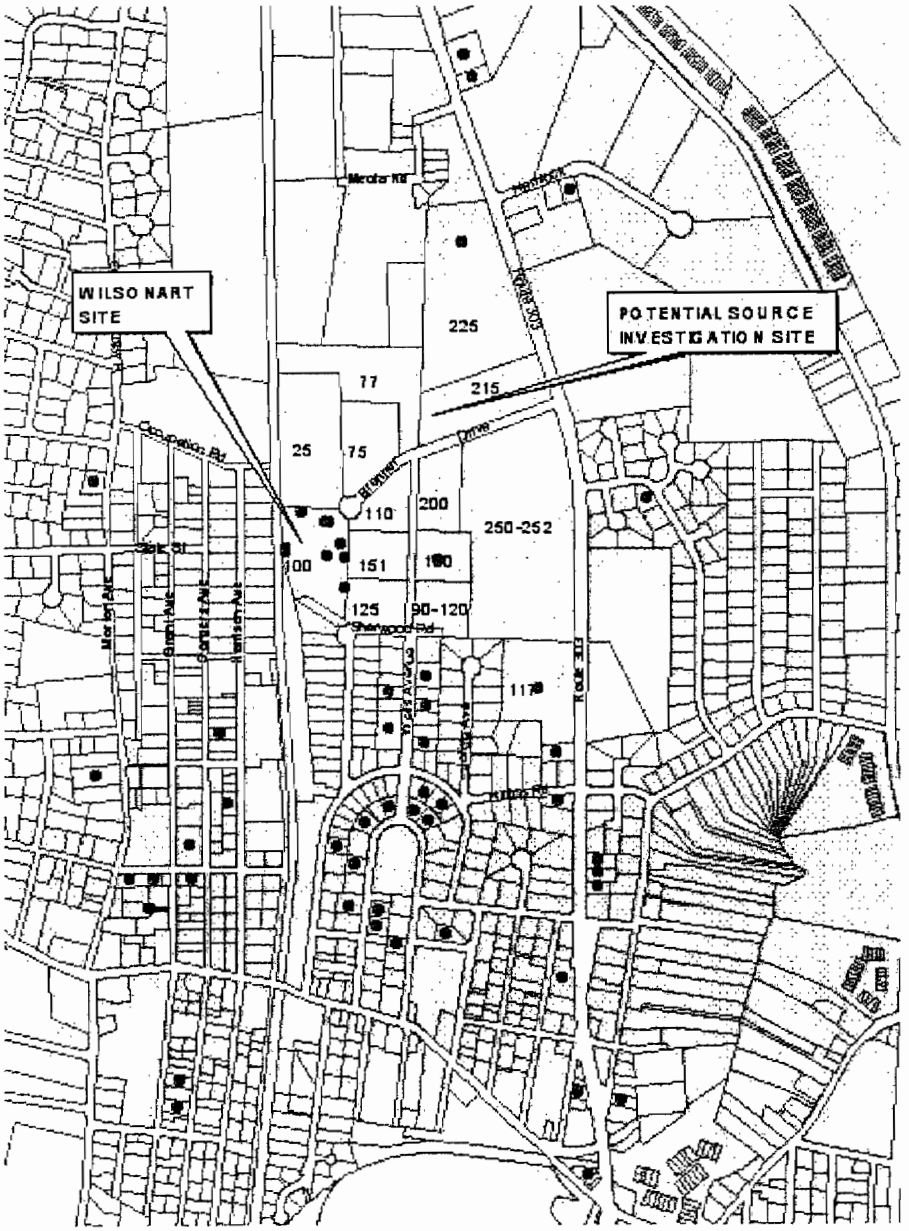
Location (Distance, Direction)	Site	Compound of Concern	Status	Database Reference
Orangeburg (not close)	Cornell Manufacturing	TCE (Impacts to GW & Soil)	Remedial Action (Proposed)	List of Inactive Hazardous Waste Site Registry

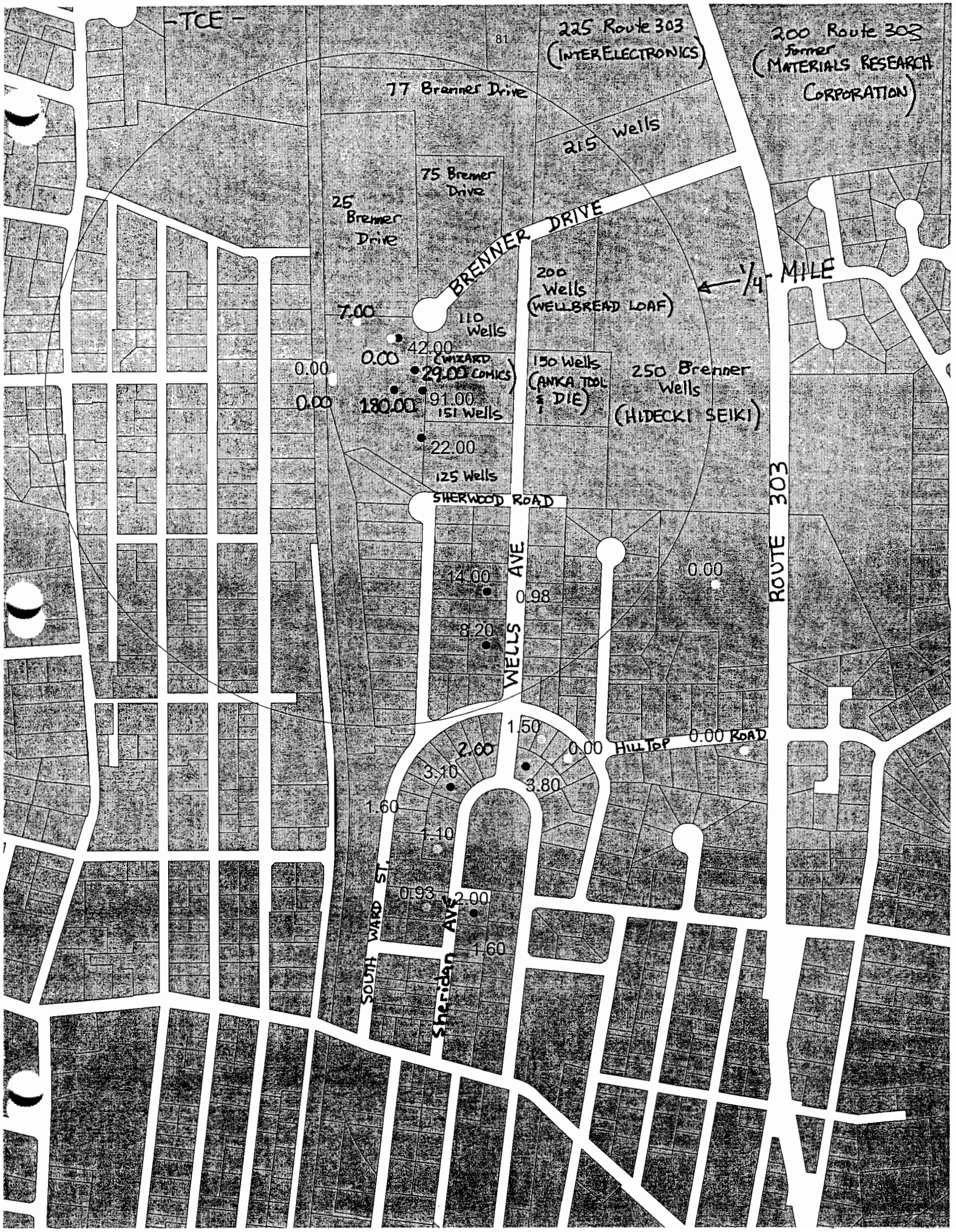
NOTES:

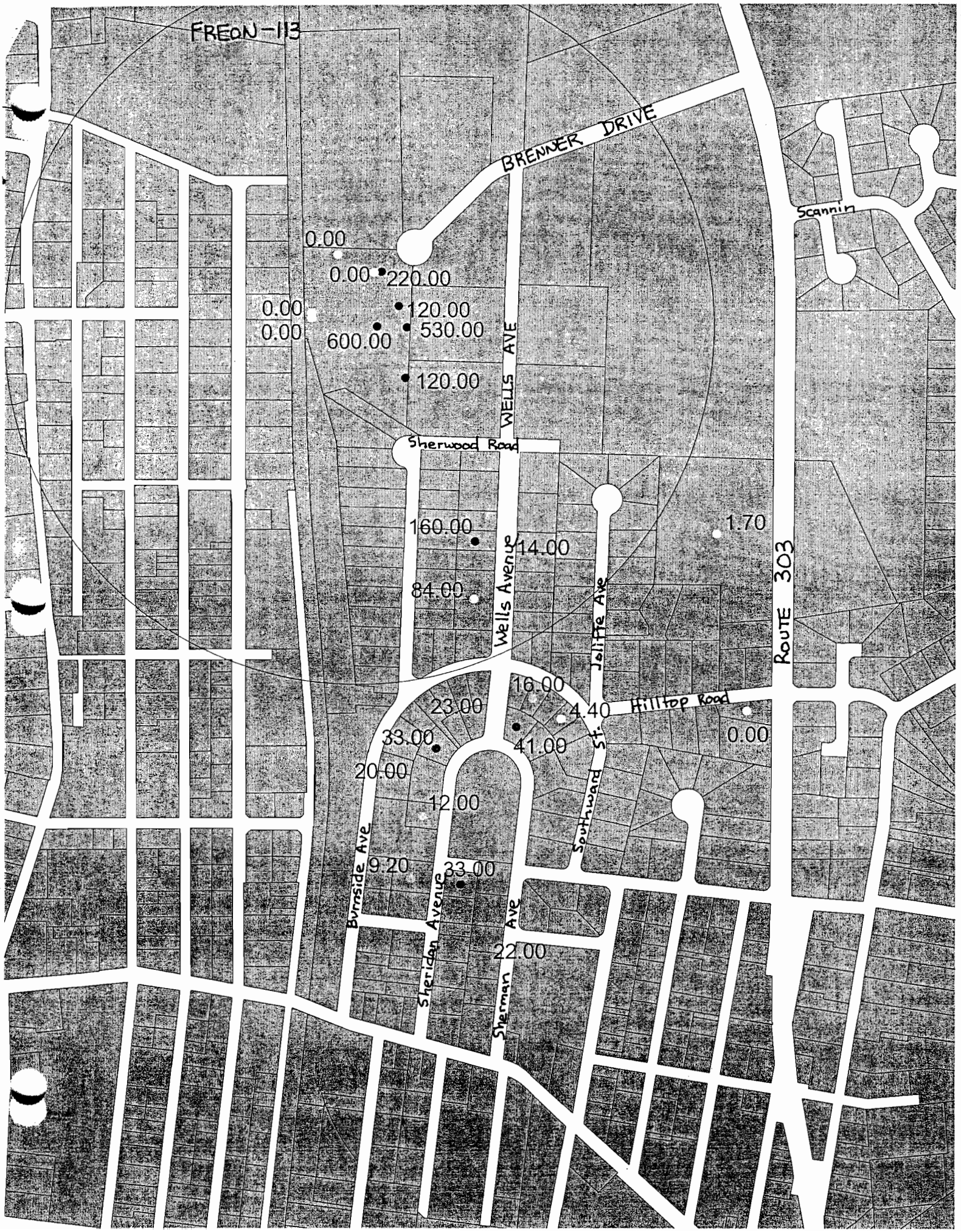
GW = Groundwater
SW = Surface Water
SED = Sediment
Databases (reported by Environmental First Earth)
RCRA-TSD Resource Compensation and Recovery Act - Treatment, Storage and Disposal (1997)
Rockland County Hazardous Waste Site (1997)
RCRIS GEN - Resource Conservation and Recovery Information System (1997)
ERNS - Emergency Response Notification Site (1997)
SPILLS - NYSDEC, Division of Spills Managements, Spill Resources (1997)
UST - Database consists of NYSDEC-registered Petroleum Bulk Storage Facilities (PBS), Major Oil Storage Facilities (MOSF) and Chemical Bulk Storage Facilities (CBS). This database is maintained by the NYSDEC - Division of Spills Management and Rockland County, New York (1997)
LUST - Database consists of NYSDEC-reported Leaking Underground Storage Tanks (LUSTs). This database is maintained by the NYSDEC - Division of Spills Management.
List of Inactive Hazardous Waste Site Registry (1999).



Well Survey - Brenner Drive Area


WILSO NART SITE
POTENTIAL SOURCE INVESTIGATION SITE
225
77
215
25
75
110
200
250-252
100
151
180
125
90-120
117
Route 303
Sherwood Rd
Meadow Rd
Oak St
Maple Ave
Birch Ave
Cypress Ave
Hemlock Ave
Tyler Ave
Cedar Ave


-TCE-
81
225 Route 303
(INTERELECTRONICS)
200 Route 303
former
(MATERIALS RESEARCH
CORPORATION)
77 Brenner Drive
215 Wells
75 Brenner
Drive
25
Brenner
Drive
BRENNER DRIVE
1/4 MILE
200
Wells
(WELLBREAD LOAF)
7.00
110
Wells
42.00
0.00
(WIZARD
29.00 COMICS)
0.00
180.00
91.00
151 Wells
150 Wells
(ANKA TOOL
& DIE)
250 Brenner
Wells
(HIDECKI SEIKI)
22.00
125 Wells
SHERWOOD ROAD
ROUTE 303
14.00
0.98
0.00
8.20
WELLS AVE
1.50
2.00
0.00
HILLTOP
0.00 ROAD
3.10
3.80
1.60
1.10
0.93
2.00
1.60
SOUTH WARD ST.
Sheridan Ave


FREON-113
BRENNER DRIVE
Scannin
0.00
0.00
220.00
0.00
120.00
0.00
530.00
600.00
120.00
WELLS AVE
Sherwood Road
160.00
14.00
1.70
84.00
Wells Avenue
Jolliffe Ave
ROUTE 303
16.00
23.00
4.40
Hilltop Road
33.00
41.00
0.00
20.00
12.00
Southward St.
Burnside Ave
9.20
33.00
Sheridan Avenue
Sherman Ave
22.00

Ownership

Premark International, Inc. (a.k.a. Wilsonart) acquired the property in 1968 from Congers Associates, Inc. The 4.81-acre parcel (Site) consisted of vacant land until 1969, where it was improved by Premark International, Inc. with one 30,000-ft^2 warehouse building. Figure 1 depicts the current property boundary, site layout and miscellaneous features. Wilsonart is a manufacturer of surfacing materials for countertops, cabinets, tub and shower surrounds, commercial fixtures and flooring. This facility served the Northeastern United States and was used for storage and distribution purposes only. Wilsonart suspended operations at this location in 1994. Hudson Technologies Company of Hillburn, New York leased the property between December 1997 to July 1999 and operated a Freon recycling and recovery facility. The Site is currently inactive. Illinois Tool Works, Inc. (ITW) of Glenview, Illinois purchased Wilsonart in November 1999.

Ownership/Leasing history is detailed below:

Prior to May 1968	Lands owned by Congers Associates (Great Neck, New York)
May 1968	4.81-acre parcel acquired by Rexall Drug and Chemical Co., Inc. (Los Angeles, California); lands occupied by Premark International, Inc., Ralph Wilson Plastics Division (a.k.a. Wilsonart International, Inc. of Temple, Texas)
December 1997 – July 1999	building leased to Hudson Technologies Company (Hillburn, New York)
November 23, 1999	ITW acquired Wilsonart and obtained title to the Site.

Previous Investigations

Environmental Products & Services, Inc., Phase 1 Environmental Site Assessment – 1 Brenner Drive, Congers, New York 10920, prepared for Hudson Technologies, Inc, March 2, 1998.

Conclusions:

- Site is not connected to the public sanitary sewer system;
- Suspended ceiling tiles may contain asbestos in the office and maintenance area of building;
- Lead-based paint was observed in various portions of the building;
- Two debris piles were observed exterior to the building;
- Inspection of the glue room, used to store laminate materials, revealed spillage;
- No underground storage tanks (USTs) were observed on the Site. Records reviewed indicate that two fuel oil USTs were removed in October 1987; and
- NYSDEC files reviewed indicated that 40 documented spills have occurred within ¼ to ½ mile of the Site.

Environmental Products & Services, Inc., Phase II Subsurface Investigation – "100" Brenner Drive, Congers, New York 10920, prepared for Hudson Technologies, Inc., August 31, 1998.

Summary:
EP&S installed and sampled three 30-foot deep monitoring wells (MW-1, MW-2 and MW-3) to evaluate if any residual contamination existed due to former operations by Wilsonart. Particular emphasis was made on the loading dock area, septic tank/leachfield area and former fuel oil USTs area.

Conclusions:

- Volatile Organic Compounds (VOCs) were detected at or above NYSDEC guidance values for groundwater in all three wells. While minor amounts of petroleum VOCs were evident, the majority of the VOCs detected in on-Site groundwater reportedly come from sources such as solvents and degreasers.

- Direction of groundwater flow at the Site was reportedly from the east-northeast to the west-southwest.
- The petroleum and chlorinated solvent-impacted groundwater was "allegedly" due to former operations at the Wilsonart facility.

Earth Tech, Inc. (Earth Tech), Supplemental Phase II Investigation Letter Report – Former Wilsonart Facility, "100" Brenner Drive, Congers, New York 10920, prepared for Wilsonart International, Inc. November 14, 1998.

Earth Tech performed an investigation to further define the possible source of groundwater VOC impacts at the Site and to assess the possibility of off-site sources. Field activities included:

- Surveying;
- Collection of 26 passive soil gas samples, which were strategically placed throughout the Site. They were collected and analyzed for VOCs (USEPA Method 8260);
- Installation of one overburden monitoring well and two bedrock monitoring wells to provide additional geologic, hydrogeologic and environmental data. Select subsurface soil samples were analyzed for VOCs (USEPA Method 8260); and
- Following development, the three existing wells (MW-1, MW-2 and MW-3) and three newly-installed wells (MW-4, MW-5 and MW-6) were sampled for VOC analysis.

Figure 3 provides the location of soil gas points and monitoring wells installed during this investigation.

Conclusions:

- Direction of groundwater flow on the Site, as observed on October 21, 1998, is from the east to west with a slight flow divide along the western edge of the Site (Figure 4).
- The presence of the flow divide appears to indicate that the source of the VOC impacts in bedrock groundwater is located to the east of the Site.
- Wilsonart is not the source of the VOC impacts due to the following findings:

  a) No VOCs were detected in the overburden, either from passive soil gas sampling or subsurface soil testing;
  b) No VOCs were detected in the shallow overburden groundwater;
  c) Biased soil gas, soil boring and monitoring well locations near potential former source areas (i.e., glue room and septic/leach field) were all non-detect for VOCs.; and
  d) The highest VOCs in the bedrock water-bearing zone occurs in wells MW-3 and MW-5; these monitoring wells appear to be at the most upgradient locations of all on-Site monitoring wells. A brief synopsis of analytical results is provided in Attachment ---).

- No Freon compounds, which were packaged by Hudson Technologies Company, were detected in any soil and/or groundwater sample.

According to EP&S's database files, several sites were identified as being within ½ mile of the Wilsonart Site or "target property". It is important to note that the target property location, as provided by Environmental FirstSearch (1997), is incorrect. According to Earth Tech's review, the actual location of the target property is approximately ¼ mile west-southwest of its "mapped" location. Environmental FirstSearch's Site Summary Report and applicable mapping are provided in Attachment --- for reference purposes. The following represents Earth Tech's review of the computer database search report, which was prepared for EP&S in 1997. This review was performed to further assess the possibility of off-site sources for the VOC-impacted groundwater observed at the Site.

No National Priority List (NPL) or Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) site was listed as being within ½ mile of the target property. In addition, no site was listed as being within ½ mile of the target property from the following databases: Resource Conservation and Recovery Information System (RCRIS)-COR, RCRIS-NLR, National Pollution Discharge Elimination System (NPDES), Facility Index System (FINDS), TRIS, New York State Department of Environmental Conservation (NYSDEC) Registry of Inactive Hazardous Waste Disposal Sites (State Site), NYSDEC, Division of Spills Management Database of emergency response actions and spill releases [Spills (Pre-1990)], NYSDEC, Division of Solid and Hazardous Materials Active Facilities Registry (Landfills), Permits, New York State Department of Health database of Public Water Supply Wells (PWS), Aquifers and ACEC.

The following databases identified sites that are within ½ mile of the target property:

RCRA - TSD (1), RCRIS – Gen (4), ERNS (1), SPILLS (39), UST (6, including target property), LUST (10), and Rockland County Hazardous Waste Sites (3).

RCRA – TSD Database

Safety-Kleen Corp., (Large Quantity Generator of Hazardous Waste, Facility I.D.: NYS00708164), 68 North Harrison Ave, ~ site is 0.3 miles southwest and downgradient of target property, nine violations have been reported, MAP I.D.=1.

RCRIS –GEN Database

Four sites were identified as being within ¼ mile from the target property. They are briefly listed below:

1) Hitachi Seiki USA, Inc. (Facility I.D.: NYD061947487), 250 Brenner Drive, 0.2 mile east and upgradient of Site, no violations reported, MAP I.D. = 2.
2) Lester Associates, Inc. (Facility I.D.: NYR000031526/ Small Quantity Generator of Hazardous Waste), 90 Wells Avenue, 0.23 mile south-southeast and potentially upgradient or crossgradient of target property, no violations reported, MAP I.D. = 3.
3) Materials Research Corp. (Facility I.D.: NYD981140809/Large Quantity Generator), 200 North Route 303, ~1/4 mile east and upgradient of target property, one violation reported (August 29, 1988), MAP I.D. = 4.
4) PAR Pharmaceutical (Unknown), 75 Brenner Drive, ~0.1 mile northeast and upgradient of target property, no violations reported, MAP I.D. = 5.

Emergency Response Notification Site (ERNS) Database

One site was identified as being within ¼ mile from the target property. Details concerning this site are listed below:

- PAR Pharmaceutical (Case #: 252658), 75 Brenner Drive, ~0.1 mile northeast and upgradient of target property, release of 109 gallons of dichloromethane on February 1, 1992, resource affected: land, action taken: will excavate contaminated soil, MAP I.D. = 5.

SPILLS Database (1990's)

Eleven (11) sites were identified as being within ¼ mile from the target property while twenty-eight (28) additional spill sites were located within ½ mile of the target property. They are briefly listed below:

Within ¼ mile of target property (11)

- PAR Pharmaceutical, 75 Brenner Drive, MAP I.D.: 8.

9311181: case is not closed, on December 14, 1993 650 gallons of unknown petroleum were released to sewer, due to equipment failure, ~0.1 mile northeast and upgradient of target property.

No National Priority List (NPL) or Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) site was listed as being within ½ mile of the target property. In addition, no site was listed as being within ½ mile of the target property from the following databases: Resource Conservation and Recovery Information System (RCRIS)-COR, RCRIS-NLR, National Pollution Discharge Elimination System (NPDES), Facility Index System (FINDS), TRIS, New York State Department of Environmental Conservation (NYSDEC) Registry of Inactive Hazardous Waste Disposal Sites (State Site), NYSDEC, Division of Spills Management Database of emergency response actions and spill releases [Spills (Pre-1990)], NYSDEC, Division of Solid and Hazardous Materials Active Facilities Registry (Landfills), Permits, New York State Department of Health database of Public Water Supply Wells (PWS), Aquifers and ACEC.

The following databases identified sites that are within ½ mile of the target property:

RCRA - TSD (1), RCRIS – Gen (4), ERNS (1), SPILLS (39), UST (6, including target property), LUST (10), and Rockland County Hazardous Waste Sites (3).

RCRA – TSD Database

Safety-Kleen Corp., (Large Quantity Generator of Hazardous Waste, Facility I.D.: NYS00708164), 68 North Harrison Ave, ~ site is 0.3 miles southwest and downgradient of target property, nine violations have been reported, MAP I.D.=1.

RCRIS –GEN Database

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1) Hitachi Seiki USA, Inc. (Facility I.D.: NYD061947487), 250 Brenner Drive, 0.2 mile east and upgradient of Site, no violations reported, MAP I.D. = 2.
2) Lester Associates, Inc. (Facility I.D.: NYR000031526/ Small Quantity Generator of Hazardous Waste), 90 Wells Avenue, 0.23 mile south-southeast and potentially upgradient or crossgradient of target property, no violations reported, MAP I.D. = 3.
3) Materials Research Corp. (Facility I.D.: NYD981140809/Large Quantity Generator), 200 North Route 303, ~1/4 mile east and upgradient of target property, one violation reported (August 29, 1988), MAP I.D. = 4.
4) PAR Pharmaceutical (Unknown), 75 Brenner Drive, ~0.1 mile northeast and upgradient of target property, no violations reported, MAP I.D. = 5.

Emergency Response Notification Site (ERNS) Database

One site was identified as being within ¼ mile from the target property. Details concerning this site are listed below:

- PAR Pharmaceutical (Case #: 252658), 75 Brenner Drive, ~0.1 mile northeast and upgradient of target property, release of 109 gallons of dichloromethane on February 1, 1992, resource affected: land, action taken: will excavate contaminated soil, MAP I.D. = 5.

SPILLS Database (1990's)

Eleven (11) sites were identified as being within ¼ mile from the target property while twenty-eight (28) additional spill sites were located within ½ mile of the target property. They are briefly listed below:

Within ¼ mile of target property (11)

- PAR Pharmaceutical, 75 Brenner Drive, MAP I.D.: 8.

9311181: case is not closed, on December 14, 1993 650 gallons of unknown petroleum were released to sewer, due to equipment failure, ~0.1 mile northeast and upgradient of target property.

- Sewer/Route 303 & Brainard Drive: MAP I.D. = 12.

9307260: closed case, 12 gallon release of unknown petroleum in sewer due to human error (September 14, 1993), ¼ mile east and upgradient of target property.

- Star-Kay White, Inc., 85 Brenner Drive, MAP I.D.: 13.

9401259: 0.0 gallon release of gasoline to groundwater due to equipment failure, 0.1 mile northeast and upgradient of the target property.

- Well Bread Loaf, Inc., 200 Brenner Drive, MAP I.D.: 14.

9412700, case is not closed, tank test failure noted on #2 fuel oil UST, 0.0 gallons released on land, 0.2 mile northeast and upgradient of the target property.

- Brenner Drive/Route 303, MAP I.D.: 12.

9605318: case is not closed, 60 gallons of unknown hazardous materials released on land, (abandoned drums), 0.3 mile northeast and upgradient of the target property.

- Safety-Kleen Corp., MAP I.D.: 9

1) 9414935: closed case, diesel released on land due to equipment failure (Qty: 1.0 gallon).
2) 9408678: closed case, 16 gallons of unknown petroleum released on land due to human error.
3) 9408843: closed case, waste oil tank overfill on land (Qty: 3.0 gallons).
4) 9407481: closed case, 10 gallons of unknown petroleum released to land due to human error.
5) 9411016: case is not closed, 20 gallons of #2 fuel oil released on land due to tank failure.

- Safety-Kleen Corp., MAP I.D.: 10

1) 9012176: closed case, 8 gallons of mineral spirits released to land due to equipment failure (February 22, 1991).

Within ½ mile of target property (28)

- Safety-Kleen Corp., MAP I.D.: 1

1) 9103251: closed case, unknown petroleum released on land due to human error (Qty: 10 gallons).
2) 9413737: closed case, unknown petroleum deliberately dumped on land (Qty: 0.00 gallons).
3) 9101606: case is NOT CLOSED, 10 gallons of hazardous material spilled on land
4) 9404827: closed case, diesel released on land due to traffic accident (Qty: 10 gallons).
5) 9009967: closed case, petroleum released on land due to human error (Qty: 20 gallons).
6) 9010870: closed, 186 gallons of unknown material were released on land (January 10, 1991).
7) 9009420: closed case, kerosene released on land due to equipment failure (Qty: 20 gallons)
8) 9006687: closed case, unknown petroleum released on land due to equipment failure (Qty: 5 gallons).
9) 9011305: closed case, unknown petroleum released on land due to equipment failure (Qty: 20 gallons).
10) 9012013: closed case, 19 gallons of unknown material released to land due to equipment failure (February 18, 1991).
11) 9106378: closed case, non PCB oil released on land (Qty: 1 gallon).
12) 9101323: closed case, non PCB oil released on land (Qty: 10 gallons).
13) 9113295: closed case, waste oil released on land due to human error (Qty: 0.00 gallons).
14) 9202388: closed case, unknown petroleum released on land (Qty: 15 gallons).
15) 9201784: case is not closed, tank overfill of unknown material released to land (Qty: 0.00 gallons).
16) 9406899: closed case, unknown petroleum released on land due to human error (Qty: 3 gallons).
17) 9310257: closed case, unknown petroleum released on land due to human error (Qty: 20 gallons).
18) 9207090: closed case, hazardous material released on land due to human error (Qty: 0.0 gallons).
19) 9205786: closed case, unknown material released on land due to equipment failure (Qty: 0.0 gallons).
20) 9203664: closed case, unknown petroleum released on land due to human error (Qty: 0.0 gallons).

21) 9112731: closed case, unknown material released to land due to equipment failure (Qty: 10 gallons).
22) 9210573: case is not closed, unknown petroleum released on land due to unknown reasons (Qty: 0.0 gallons).

Within ½ mile of target property (7)

Safety-Kleen Corp., 68 North Harrison Avenue, ~0.3 miles southwest and downgradient of target property, MAP I.D. = 1.

1) #8709469/Active, overfill of waste oil UST.
2) #8900633/Active, overfill of petroleum UST.
3) #8709489/Active, waste oil UST.
4) #9201784/Active, overfill of unknown material UST, released on land on May 13, 1992.
5) #9007775/Active, release of petroleum
6) #8710051/Active, release of chromium sulfate (UST).
7) Tyree #8606011/Active, release of petroleum.

Earth Tech's review of the Rockland County Hazardous Waste Site Database identified the following sites, which are of close proximity to the target property. They are briefly listed below:

1) Hitachi Seiki USA, Inc. (Facility I.D.: NYD061947487), 250 Brenner Drive, 0.2 mile east and upgradient of target property, MAP I.D. = 2.
2) Safety-Kleen Corp. 2-118-01 (Facility I.D.: NYD000708164), 68 North Harrison Avenue, ~0.3 miles southwest and downgradient of target property, MAP I.D.: 1.
3) Materials Research Corp. (Facility I.D.: NYD981140387), 200 North Route 303, ~1/4 mile east and upgradient of target property, MAP I.D.: 4.

ALPHA
GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

MAR - 7 2001

March 7, 2001

Mr. Mark Williams
EarthTech Inc.
12 Metro Park Road
Albany, New York 12205

Re: Fracture Trace Analysis
Wilsonart Site

Dear Mark:

I completed a fracture trace analysis at your request for the Wilsonart site in Clarkstown, Rockland County, New York. The analysis was conducted by identifying linear features from air photographs and a 7.5 minute topographic map. The linear features identified from these two media represent potential fractures along faults, joints and bedding planes in the rock. Fractures derived from these geologic features represent potentially significant zones of ground water storage and flow.

Potential fractures identified from the air photographs are illustrated on the attached Figure 1. These photographic linears were identified by inspecting a pair of overlapping (stereographic), black and white, air photographs that were taken on March 27, 1968. The inspection was conducted by viewing the photographs through a stereoscope, which creates a three-dimensional image when used with stereographically paired photographs.

Potential fractures that were identified from the topographic map are indicated as topographic linears on the attached Figure 2. These features were identified from the topographic forms observed on the Haverstraw, 7.5 minute, Quadrangle Map.

The photographic and topographic linears were combined on a Fracture Trace Map (Figure 3). The results indicate that the dominant orientation of linears in the region containing the site is north-south. Secondary orientations include; northwest-southeast in the region north of the site, east-west in the area that contains the site, and northeast-southwest in the area south of the site. Two significant north-south linears were observed both to the east and west of the site. The feature to the west of the site, that is aligned with the railroad tracks, is one of the most well defined lineaments in the site area. The two east-west oriented features that were visible to the north and south of the site are very weakly defined.

In summary, the linear features identified in the site area represent potential fractures that may represent significant flow zones for ground water. Ground water moves along these features from areas of high hydraulic head to areas of low hydraulic head. The evidence suggest that the

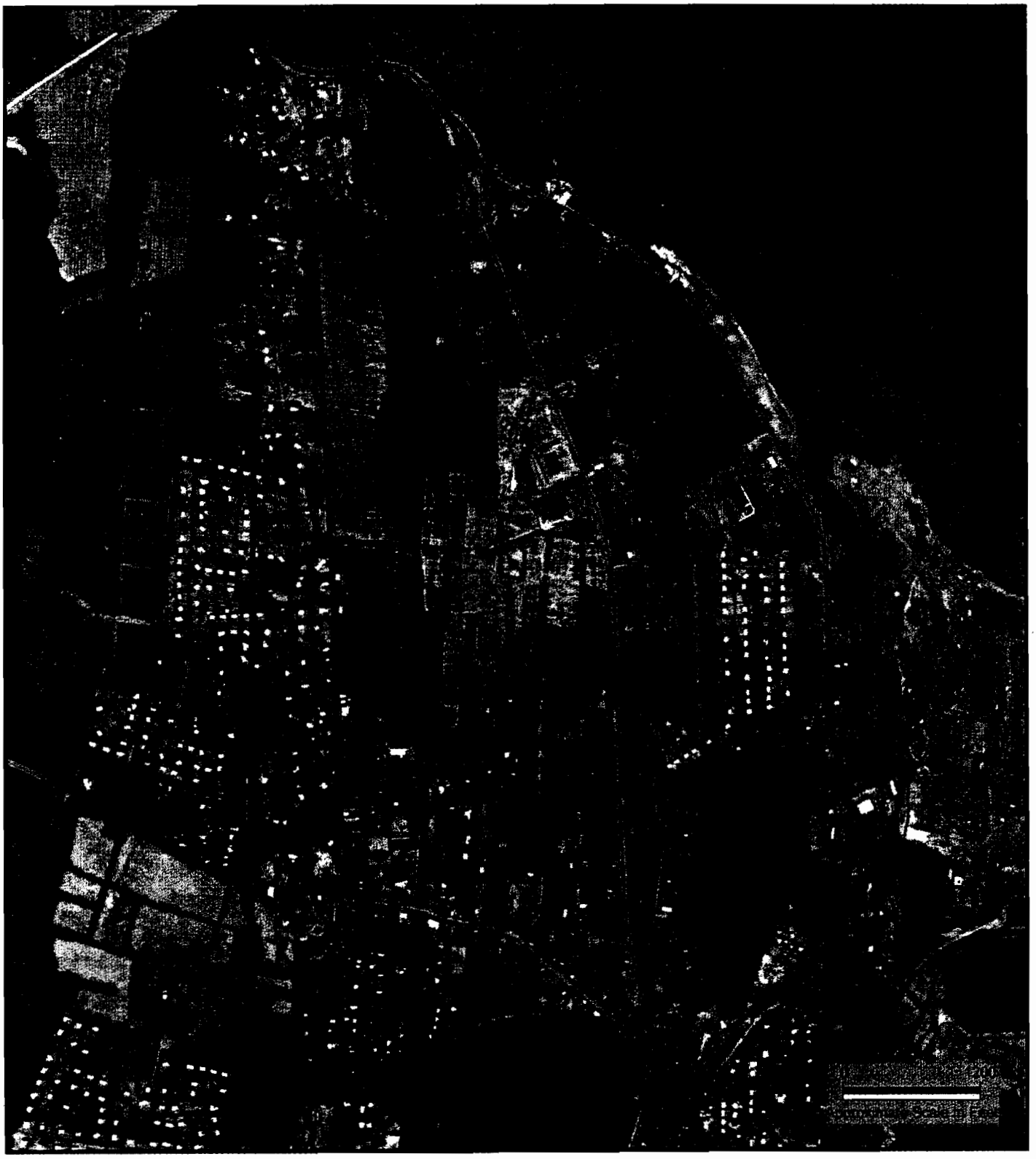
north-south oriented features are the dominant flow paths with the east-west, northeast-southwest, and northwest-southeast flow paths being less significant. The linear features that were identified represent all of those which could be readily observed; however, there are likely many more fractures in the area than are represented by the notations on the attached maps. The unobserved fractures would tend to follow the indicated trends.

Please do not hesitate to call if you need further clarification or would like to discuss ground water movement in particular areas around the site. Thank you for the opportunity to be of service.

Sincerely,
Alpha Geoscience

Samuel W. Gowan, PhD CPG

SWG/dt
attachments



Legend

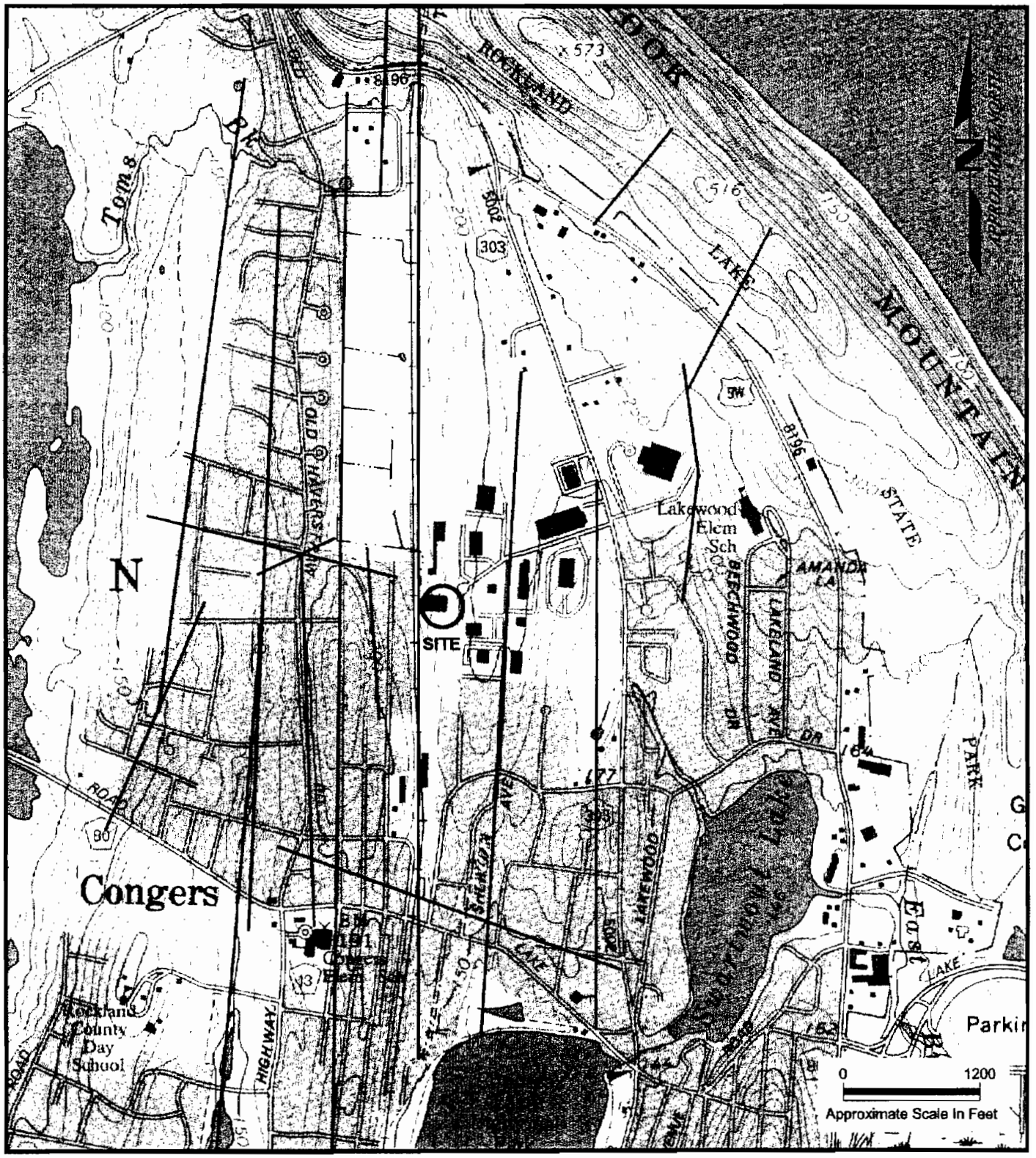
——————— Photographic Linear

Photo Date: 03/27/1968

file: 01105-01.cnv

ALPHA GEOSCIENCE

Figure 1
Photographic Linear Map
Wilsonart Site
Alpha Geoscience Project No. 01105
Clarkstown Rockland Co., NY



Legend

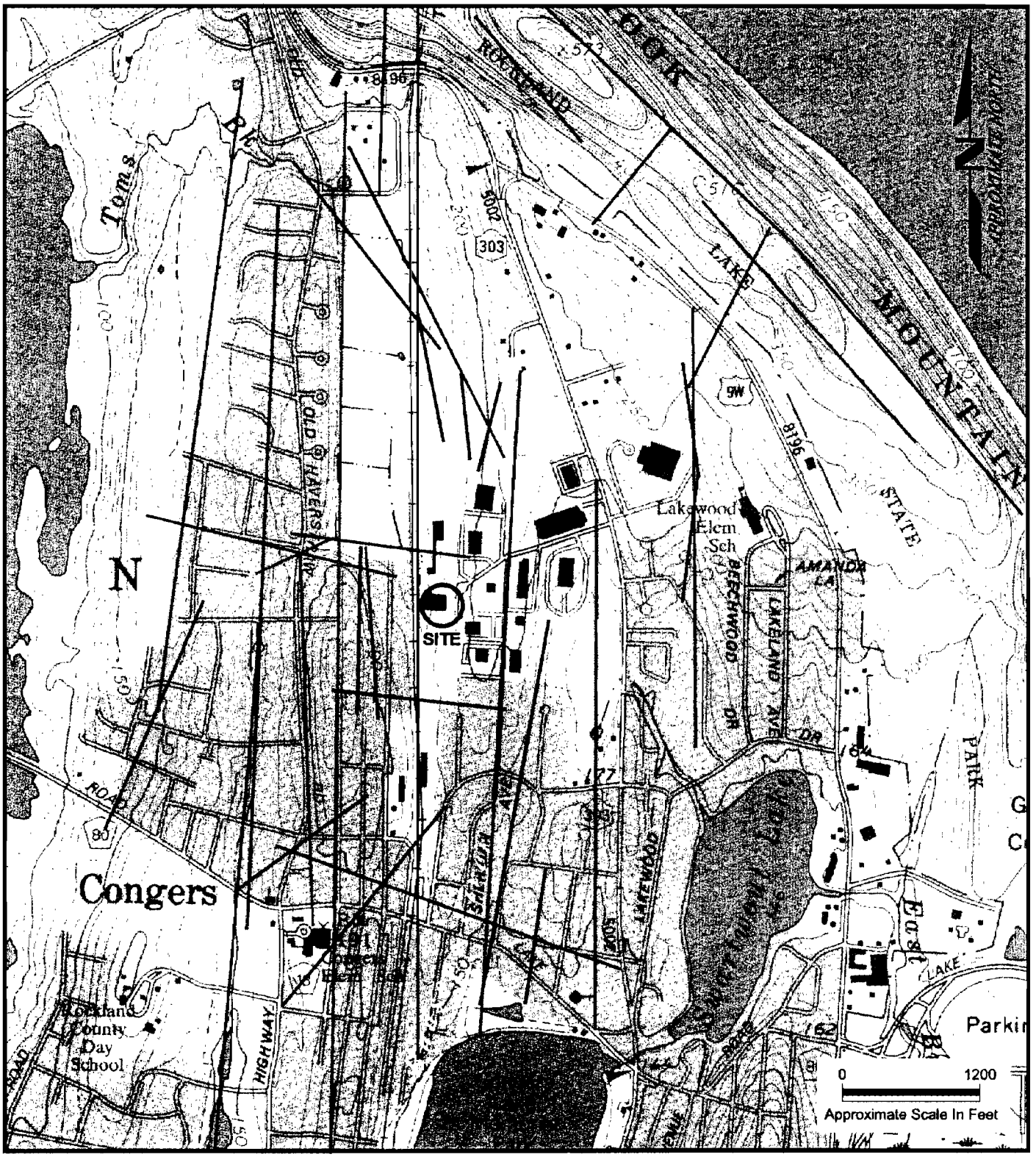
——————— Topographic Linear

Map Reference: Haverstraw Quadrangle NYSDOT 7.5 Minute Series, 1990

file: 01105-02.cnv

ALPHA GEOSCIENCE

Figure 2
Topographic Linear Map
Wilsonart Site
Alpha Geoscience Project No. 01105
Clarkstown Rockland Co., NY



Legend

- Topographic Linear
- Photographic Linear
- Topographic & Photographic Linear

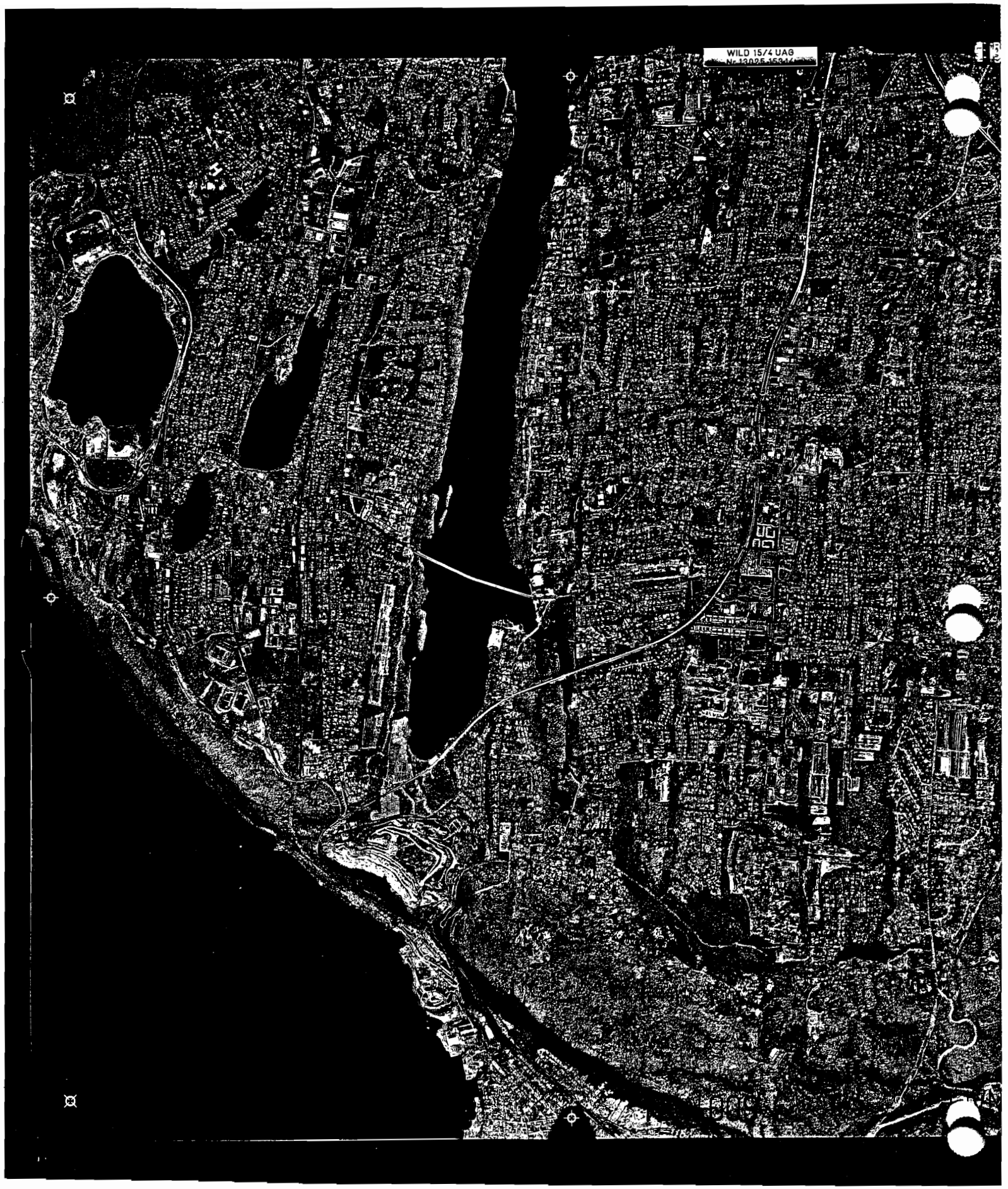
Map Reference: Haverstraw Quadrangle NYSDOT 7.5 Minute Series, 1990

file: 01105-02.cnv

ALPHA GEOSCIENCE

Figure 3
Fracture Trace Map
Wilsonart Site
Alpha Geoscience Project No. 01105
Clarkstown Rockland Co., NY

S-27-68
NY-9-1488-8772


WILD 15/4 UAG

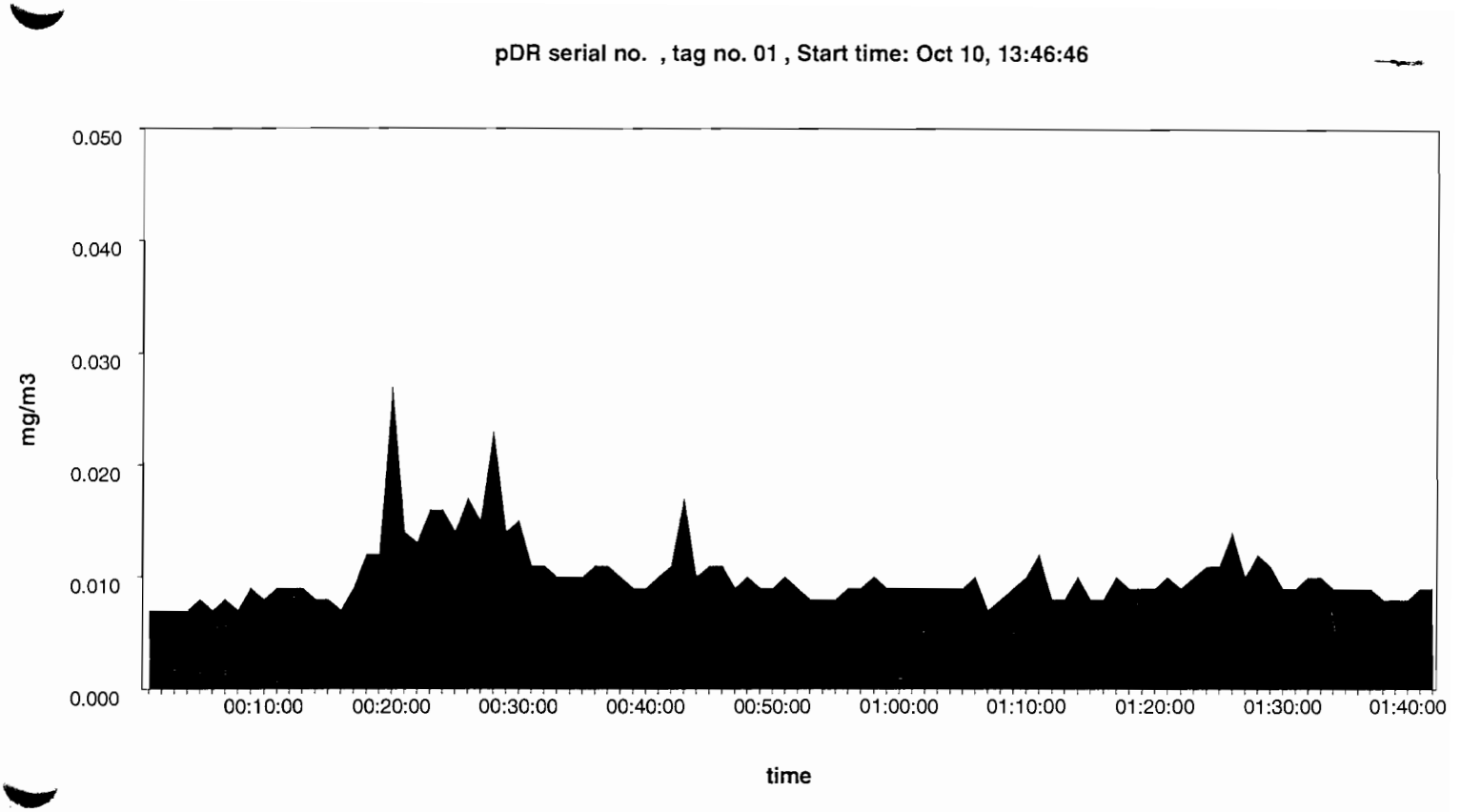
APPENDIX C

PERIMETER AIR MONITORING DATA

pDR serial number: 2015
Tag Number: 01
Number of logged points: 231
Start time and date: 13:46:46 Oct 10
Elapsed time: 03:51:00
Logging period (sec): 60
Calibration Factor (%): 100
Max Display Concentration (mg/m3): 0.107
Max DC time: 16:55:45 Oct 10
Max STEL Concentration (mg/m3): 0.015
Max STEL time: 14:16:21 Oct 10
Overall AvgConc (mg/m3): 0.011

Point#, Date, Time, Avg (mg/m3)
1, 10 Oct, 13:46:46, 0.007
2, 10 Oct, 13:47:46, 0.007
3, 10 Oct, 13:48:46, 0.007
4, 10 Oct, 13:49:46, 0.007
5, 10 Oct, 13:50:46, 0.008
6, 10 Oct, 13:51:46, 0.007
7, 10 Oct, 13:52:46, 0.008
8, 10 Oct, 13:53:46, 0.007
9, 10 Oct, 13:54:46, 0.009
10, 10 Oct, 13:55:46, 0.008
11, 10 Oct, 13:56:46, 0.009
12, 10 Oct, 13:57:46, 0.009
13, 10 Oct, 13:58:46, 0.009
14, 10 Oct, 13:59:46, 0.008
15, 10 Oct, 14:00:46, 0.008
16, 10 Oct, 14:01:46, 0.007
17, 10 Oct, 14:02:46, 0.009
18, 10 Oct, 14:03:46, 0.012
19 10 Oct, 14:04:46, 0.012
0 Oct, 14:05:46, 0.027
0 Oct, 14:06:46, 0.014
22, 10 Oct, 14:07:46, 0.013
23, 10 Oct, 14:08:46, 0.016
24, 10 Oct, 14:09:46, 0.016
25, 10 Oct, 14:10:46, 0.014
26, 10 Oct, 14:11:46, 0.017
27, 10 Oct, 14:12:46, 0.015
28, 10 Oct, 14:13:46, 0.023
29, 10 Oct, 14:14:46, 0.014
30, 10 Oct, 14:15:46, 0.015
31, 10 Oct, 14:16:46, 0.011
32, 10 Oct, 14:17:46, 0.011
33, 10 Oct, 14:18:46, 0.010
34, 10 Oct, 14:19:46, 0.010
35, 10 Oct, 14:20:46, 0.010
36, 10 Oct, 14:21:46, 0.011
37, 10 Oct, 14:22:46, 0.011
38, 10 Oct, 14:23:46, 0.010
39, 10 Oct, 14:24:46, 0.009
40, 10 Oct, 14:25:46, 0.009
41, 10 Oct, 14:26:46, 0.010
42, 10 Oct, 14:27:46, 0.011
43, 10 Oct, 14:28:46, 0.017
44, 10 Oct, 14:29:46, 0.010
45, 10 Oct, 14:30:46, 0.011
46, 10 Oct, 14:31:46, 0.011
0 Oct, 14:32:46, 0.009
0 Oct, 14:33:46, 0.010
49, 10 Oct, 14:34:46, 0.009
50, 10 Oct, 14:35:46, 0.009
51, 10 Oct, 14:36:46, 0.010
52, 10 Oct, 14:37:46, 0.009
53, 10 Oct, 14:38:46, 0.008

121, 10 Oct, 15:46:46, 0.008
122, 10 Oct, 15:47:46, 0.009
123, 10 Oct, 15:48:46, 0.014
124, 10 Oct, 15:49:46, 0.011
125, 10 Oct, 15:50:46, 0.010
10 Oct, 15:51:46, 0.010
0 Oct, 15:52:46, 0.013
12[illegible], 10 Oct, 15:53:46, 0.009
129, 10 Oct, 15:54:46, 0.009
130, 10 Oct, 15:55:46, 0.008
131, 10 Oct, 15:56:46, 0.010
132, 10 Oct, 15:57:46, 0.008
133, 10 Oct, 15:58:46, 0.011
134, 10 Oct, 15:59:46, 0.013
135, 10 Oct, 16:00:46, 0.013
136, 10 Oct, 16:01:46, 0.011
137, 10 Oct, 16:02:46, 0.012
138, 10 Oct, 16:03:46, 0.017
139, 10 Oct, 16:04:46, 0.014
140, 10 Oct, 16:05:46, 0.010
141, 10 Oct, 16:06:46, 0.010
142, 10 Oct, 16:07:46, 0.009
143, 10 Oct, 16:08:46, 0.009
144, 10 Oct, 16:09:46, 0.017
145, 10 Oct, 16:10:46, 0.011
146, 10 Oct, 16:11:46, 0.010
147, 10 Oct, 16:12:46, 0.011
148, 10 Oct, 16:13:46, 0.013
149, 10 Oct, 16:14:46, 0.011
150, 10 Oct, 16:15:46, 0.011
151, 10 Oct, 16:16:46, 0.012
152, 10 Oct, 16:17:46, 0.013
[illegible] 10 Oct, 16:18:46, 0.012
10 Oct, 16:19:46, 0.014
[illegible], 10 Oct, 16:20:46, 0.008
156, 10 Oct, 16:21:46, 0.009
157, 10 Oct, 16:22:46, 0.010
158, 10 Oct, 16:23:46, 0.009
159, 10 Oct, 16:24:46, 0.010
160, 10 Oct, 16:25:46, 0.010
161, 10 Oct, 16:26:46, 0.011
162, 10 Oct, 16:27:46, 0.010
163, 10 Oct, 16:28:46, 0.010
164, 10 Oct, 16:29:46, 0.028
165, 10 Oct, 16:30:46, 0.013
166, 10 Oct, 16:31:46, 0.011
167, 10 Oct, 16:32:46, 0.011
168, 10 Oct, 16:33:46, 0.009
169, 10 Oct, 16:34:46, 0.011
170, 10 Oct, 16:35:46, 0.011
171, 10 Oct, 16:36:46, 0.010
172, 10 Oct, 16:37:46, 0.008
173, 10 Oct, 16:38:46, 0.010
174, 10 Oct, 16:39:46, 0.011
175, 10 Oct, 16:40:46, 0.012
176, 10 Oct, 16:41:46, 0.011
177, 10 Oct, 16:42:46, 0.012
178, 10 Oct, 16:43:46, 0.012
179, 10 Oct, 16:44:46, 0.010
[illegible] 10 Oct, 16:45:46, 0.009
10 Oct, 16:46:46, 0.013
10 Oct, 16:47:46, 0.011
183, 10 Oct, 16:48:46, 0.012
184, 10 Oct, 16:49:46, 0.012
185, 10 Oct, 16:50:46, 0.011
186, 10 Oct, 16:51:46, 0.011
187, 10 Oct, 16:52:46, 0.014


pDR serial no. , tag no. 01 , Start time: Oct 10, 13:46:46
0.050
0.040
0.030
0.020
0.010
0.000
mg/m3
00:10:00
00:20:00
00:30:00
00:40:00
00:50:00
01:00:00
01:10:00
01:20:00
01:30:00
01:40:00
time

pDR serial number: 2015
Tag Number: 02
Number of logged points: 529
Start time and date: 07:24:19 Oct 11
Elapsed time: 08:49:00
Logging period (sec): 60
Calibration Factor (%): 100
Max Display Concentration (mg/m3): 0.168
Max DC time: 16:07:22 Oct 11
Max STEL Concentration (mg/m3): 0.010
Max STEL time: 16:11:25 Oct 11
Overall AvgConc (mg/m3): 0.005

Point#, Date, Time, Avg (mg/m3)
1, 11 Oct, 07:24:19, 0.002
2, 11 Oct, 07:25:19, 0.003
3, 11 Oct, 07:26:19, 0.005
4, 11 Oct, 07:27:19, 0.006
5, 11 Oct, 07:28:19, 0.005
6, 11 Oct, 07:29:19, 0.005
7, 11 Oct, 07:30:19, 0.005
8, 11 Oct, 07:31:19, 0.005
9, 11 Oct, 07:32:19, 0.007
10, 11 Oct, 07:33:19, 0.006
11, 11 Oct, 07:34:19, 0.005
12, 11 Oct, 07:35:19, 0.004
13, 11 Oct, 07:36:19, 0.004
14, 11 Oct, 07:37:19, 0.003
15, 11 Oct, 07:38:19, 0.003
16, 11 Oct, 07:39:19, 0.004
17, 11 Oct, 07:40:19, 0.004
18, 11 Oct, 07:41:19, 0.004
19, 11 Oct, 07:42:19, 0.004
20, 11 Oct, 07:43:19, 0.004
21, 11 Oct, 07:44:19, 0.004
22, 11 Oct, 07:45:19, 0.003
23, 11 Oct, 07:46:19, 0.004
24, 11 Oct, 07:47:19, 0.003
25, 11 Oct, 07:48:19, 0.003
26, 11 Oct, 07:49:19, 0.004
27, 11 Oct, 07:50:19, 0.005
28, 11 Oct, 07:51:19, 0.003
29, 11 Oct, 07:52:19, 0.004
30, 11 Oct, 07:53:19, 0.005
31, 11 Oct, 07:54:19, 0.003
32, 11 Oct, 07:55:19, 0.003
33, 11 Oct, 07:56:19, 0.002
34, 11 Oct, 07:57:19, 0.002
35, 11 Oct, 07:58:19, 0.002
36, 11 Oct, 07:59:19, 0.004
37, 11 Oct, 08:00:19, 0.001
38, 11 Oct, 08:01:19, 0.001
39, 11 Oct, 08:02:19, 0.001
40, 11 Oct, 08:03:19, 0.003
41, 11 Oct, 08:04:19, 0.002
42, 11 Oct, 08:05:19, 0.002
43, 11 Oct, 08:06:19, 0.002
44, 11 Oct, 08:07:19, 0.001
45, 11 Oct, 08:08:19, 0.002
46, 11 Oct, 08:09:19, 0.003
47, 11 Oct, 08:10:19, 0.002
48, 11 Oct, 08:11:19, 0.002
49, 11 Oct, 08:12:19, 0.002
50, 11 Oct, 08:13:19, 0.001
51, 11 Oct, 08:14:19, 0.000
52, 11 Oct, 08:15:19, 0.000
53, 11 Oct, 08:16:19, 0.001

121, 11 Oct, 09:24:19, 0.002
122, 11 Oct, 09:25:19, 0.002
123, 11 Oct, 09:26:19, 0.005
124, 11 Oct, 09:27:19, 0.006
125, 11 Oct, 09:28:19, 0.005
[illegible] 11 Oct, 09:29:19, 0.003
[illegible] 1 Oct, 09:30:19, 0.002
128, 11 Oct, 09:31:19, 0.003
129, 11 Oct, 09:32:19, 0.004
130, 11 Oct, 09:33:19, 0.003
131, 11 Oct, 09:34:19, 0.002
132, 11 Oct, 09:35:19, 0.002
133, 11 Oct, 09:36:19, 0.001
134, 11 Oct, 09:37:19, 0.001
135, 11 Oct, 09:38:19, 0.003
136, 11 Oct, 09:39:19, 0.004
137, 11 Oct, 09:40:19, 0.002
138, 11 Oct, 09:41:19, 0.002
139, 11 Oct, 09:42:19, 0.002
140, 11 Oct, 09:43:19, 0.001
141, 11 Oct, 09:44:19, 0.002
142, 11 Oct, 09:45:19, 0.002
143, 11 Oct, 09:46:19, 0.003
144, 11 Oct, 09:47:19, 0.002
145, 11 Oct, 09:48:19, 0.002
146, 11 Oct, 09:49:19, 0.002
147, 11 Oct, 09:50:19, 0.007
148, 11 Oct, 09:51:19, 0.001
149, 11 Oct, 09:52:19, 0.001
150, 11 Oct, 09:53:19, 0.000
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152, 11 Oct, 09:55:19, 0.000
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[illegible] 11 Oct, 09:57:19, 0.001
[illegible] 11 Oct, 09:58:19, 0.002
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157, 11 Oct, 10:00:19, 0.001
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159, 11 Oct, 10:02:19, 0.001
160, 11 Oct, 10:03:19, 0.002
161, 11 Oct, 10:04:19, 0.001
162, 11 Oct, 10:05:19, 0.002
163, 11 Oct, 10:06:19, 0.003
164, 11 Oct, 10:07:19, 0.002
165, 11 Oct, 10:08:19, 0.002
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174, 11 Oct, 10:17:19, 0.003
175, 11 Oct, 10:18:19, 0.002
176, 11 Oct, 10:19:19, 0.002
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179, 11 Oct, 10:22:19, 0.003
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183, 11 Oct, 10:26:19, 0.004
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186, 11 Oct, 10:29:19, 0.004
187, 11 Oct, 10:30:19, 0.004

255, 11 Oct, 11:38:19, 0.004
256, 11 Oct, 11:39:19, 0.003
257, 11 Oct, 11:40:19, 0.003
258, 11 Oct, 11:41:19, 0.004
259, 11 Oct, 11:42:19, 0.004
11 Oct, 11:43:19, 0.003
1 Oct, 11:44:19, 0.004
262, 11 Oct, 11:45:19, 0.004
263, 11 Oct, 11:46:19, 0.005
264, 11 Oct, 11:47:19, 0.007
265, 11 Oct, 11:48:19, 0.004
266, 11 Oct, 11:49:19, 0.004
267, 11 Oct, 11:50:19, 0.004
268, 11 Oct, 11:51:19, 0.005
269, 11 Oct, 11:52:19, 0.004
270, 11 Oct, 11:53:19, 0.004
271, 11 Oct, 11:54:19, 0.013
272, 11 Oct, 11:55:19, 0.006
273, 11 Oct, 11:56:19, 0.004
274, 11 Oct, 11:57:19, 0.004
275, 11 Oct, 11:58:19, 0.004
276, 11 Oct, 11:59:19, 0.004
277, 11 Oct, 12:00:19, 0.008
278, 11 Oct, 12:01:19, 0.011
279, 11 Oct, 12:02:19, 0.004
280, 11 Oct, 12:03:19, 0.005
281, 11 Oct, 12:04:19, 0.004
282, 11 Oct, 12:05:19, 0.005
283, 11 Oct, 12:06:19, 0.005
284, 11 Oct, 12:07:19, 0.004
285, 11 Oct, 12:08:19, 0.004
286, 11 Oct, 12:09:19, 0.004
11 Oct, 12:10:19, 0.004
1 Oct, 12:11:19, 0.024
11 Oct, 12:12:19, 0.007
290, 11 Oct, 12:13:19, 0.005
291, 11 Oct, 12:14:19, 0.004
292, 11 Oct, 12:15:19, 0.006
293, 11 Oct, 12:16:19, 0.008
294, 11 Oct, 12:17:19, 0.013
295, 11 Oct, 12:18:19, 0.005
296, 11 Oct, 12:19:19, 0.005
297, 11 Oct, 12:20:19, 0.004
298, 11 Oct, 12:21:19, 0.005
299, 11 Oct, 12:22:19, 0.004
300, 11 Oct, 12:23:19, 0.006
301, 11 Oct, 12:24:19, 0.005
302, 11 Oct, 12:25:19, 0.005
303, 11 Oct, 12:26:19, 0.005
304, 11 Oct, 12:27:19, 0.006
305, 11 Oct, 12:28:19, 0.004
306, 11 Oct, 12:29:19, 0.005
307, 11 Oct, 12:30:19, 0.005
308, 11 Oct, 12:31:19, 0.005
309, 11 Oct, 12:32:19, 0.005
310, 11 Oct, 12:33:19, 0.005
311, 11 Oct, 12:34:19, 0.004
312, 11 Oct, 12:35:19, 0.016
313, 11 Oct, 12:36:19, 0.005
11 Oct, 12:37:19, 0.008
1 Oct, 12:38:19, 0.005
11 Oct, 12:39:19, 0.004
317, 11 Oct, 12:40:19, 0.004
318, 11 Oct, 12:41:19, 0.005
319, 11 Oct, 12:42:19, 0.005
320, 11 Oct, 12:43:19, 0.006
321, 11 Oct, 12:44:19, 0.008

389, 11 Oct, 13:52:19, 0.006
390, 11 Oct, 13:53:19, 0.005
391, 11 Oct, 13:54:19, 0.007
392, 11 Oct, 13:55:19, 0.005
393, 11 Oct, 13:56:19, 0.005
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[illegible]1 Oct, 13:58:19, 0.006
396, 11 Oct, 13:59:19, 0.005
397, 11 Oct, 14:00:19, 0.005
398, 11 Oct, 14:01:19, 0.005
399, 11 Oct, 14:02:19, 0.005
400, 11 Oct, 14:03:19, 0.006
401, 11 Oct, 14:04:19, 0.005
402, 11 Oct, 14:05:19, 0.006
403, 11 Oct, 14:06:19, 0.007
404, 11 Oct, 14:07:19, 0.006
405, 11 Oct, 14:08:19, 0.006
406, 11 Oct, 14:09:19, 0.006
407, 11 Oct, 14:10:19, 0.006
408, 11 Oct, 14:11:19, 0.006
409, 11 Oct, 14:12:19, 0.005
410, 11 Oct, 14:13:19, 0.005
411, 11 Oct, 14:14:19, 0.004
412, 11 Oct, 14:15:19, 0.006
413, 11 Oct, 14:16:19, 0.006
414, 11 Oct, 14:17:19, 0.006
415, 11 Oct, 14:18:19, 0.006
416, 11 Oct, 14:19:19, 0.006
417, 11 Oct, 14:20:19, 0.007
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419, 11 Oct, 14:22:19, 0.005
420, 11 Oct, 14:23:19, 0.006
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[illegible]11 Oct, 14:26:19, 0.006
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425, 11 Oct, 14:28:19, 0.006
426, 11 Oct, 14:29:19, 0.006
427, 11 Oct, 14:30:19, 0.005
428, 11 Oct, 14:31:19, 0.006
429, 11 Oct, 14:32:19, 0.007
430, 11 Oct, 14:33:19, 0.006
431, 11 Oct, 14:34:19, 0.005
432, 11 Oct, 14:35:19, 0.006
433, 11 Oct, 14:36:19, 0.006
434, 11 Oct, 14:37:19, 0.007
435, 11 Oct, 14:38:19, 0.006
436, 11 Oct, 14:39:19, 0.006
437, 11 Oct, 14:40:19, 0.007
438, 11 Oct, 14:41:19, 0.007
439, 11 Oct, 14:42:19, 0.007
440, 11 Oct, 14:43:19, 0.007
441, 11 Oct, 14:44:19, 0.007
442, 11 Oct, 14:45:19, 0.007
443, 11 Oct, 14:46:19, 0.007
444, 11 Oct, 14:47:19, 0.005
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446, 11 Oct, 14:49:19, 0.006
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[illegible]11 Oct, 14:53:19, 0.008
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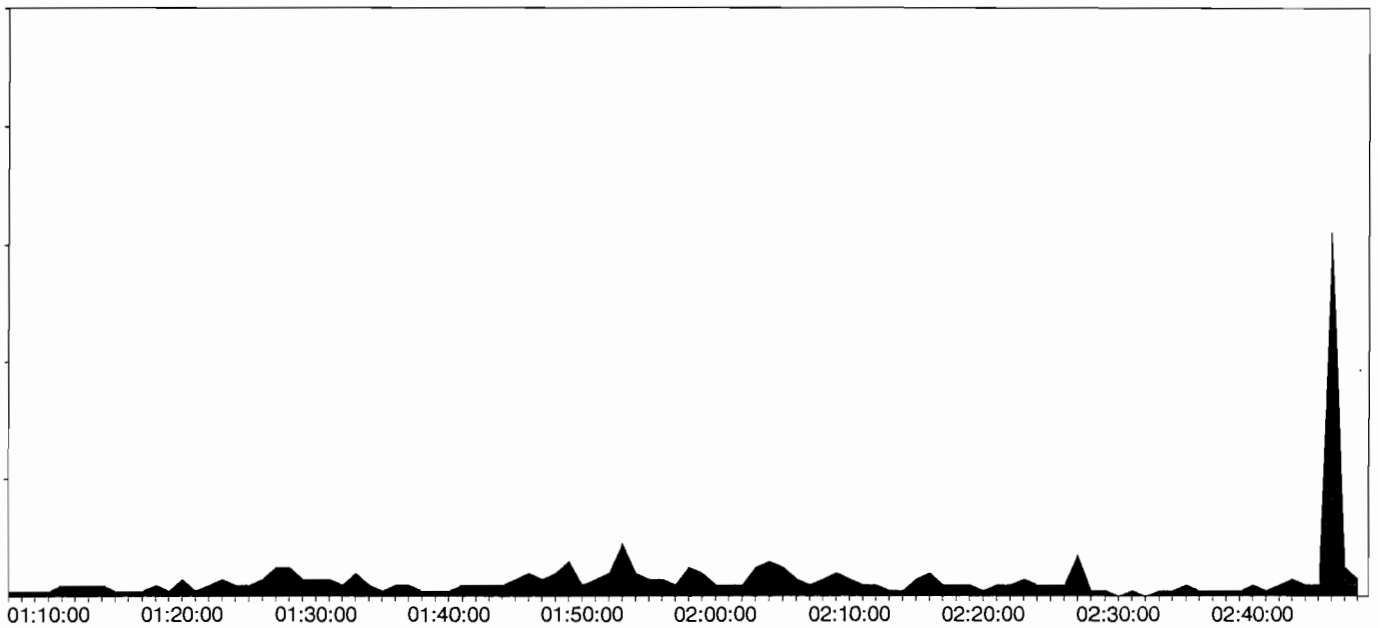
453, 11 Oct, 14:56:19, 0.006
454, 11 Oct, 14:57:19, 0.006
455, 11 Oct, 14:58:19, 0.006

523, 11 Oct, 16:06:19, 0.035
524, 11 Oct, 16:07:19, 0.009
525, 11 Oct, 16:08:19, 0.011
526, 11 Oct, 16:09:19, 0.008
527, 11 Oct, 16:10:19, 0.010
11 Oct, 16:11:19, 0.006
1 Oct, 16:12:19, 0.007

pDR serial no. , tag no. 02 , Start time: Oct 11, 07:24:19



54, 12 Oct, 08:47:24, 0.020
55, 12 Oct, 08:48:24, 0.015
56, 12 Oct, 08:49:24, 0.016
57, 12 Oct, 08:50:24, 0.014
58, 12 Oct, 08:51:24, 0.016
[illegible]2 Oct, 08:52:24, 0.016
[illegible]2 Oct, 08:53:24, 0.013
61, 12 Oct, 08:54:24, 0.015
62, 12 Oct, 08:55:24, 0.014
63, 12 Oct, 08:56:24, 0.015
64, 12 Oct, 08:57:24, 0.017
65, 12 Oct, 08:58:24, 0.015
66, 12 Oct, 08:59:24, 0.017
67, 12 Oct, 09:00:24, 0.014
68, 12 Oct, 09:01:24, 0.013
69, 12 Oct, 09:02:24, 0.013
70, 12 Oct, 09:03:24, 0.014
71, 12 Oct, 09:04:24, 0.014
72, 12 Oct, 09:05:24, 0.015
73, 12 Oct, 09:06:24, 0.013
74, 12 Oct, 09:07:24, 0.014
75, 12 Oct, 09:08:24, 0.014
76, 12 Oct, 09:09:24, 0.012
77, 12 Oct, 09:10:24, 0.014
78, 12 Oct, 09:11:24, 0.011
79, 12 Oct, 09:12:24, 0.014
80, 12 Oct, 09:13:24, 0.010
81, 12 Oct, 09:14:24, 0.013
82, 12 Oct, 09:15:24, 0.012
83, 12 Oct, 09:16:24, 0.019
84, 12 Oct, 09:17:24, 0.014
85, 12 Oct, 09:18:24, 0.013
[illegible]12 Oct, 09:19:24, 0.015
[illegible]2 Oct, 09:20:24, 0.012
[illegible]12 Oct, 09:21:24, 0.014
89, 12 Oct, 09:22:24, 0.013
90, 12 Oct, 09:23:24, 0.012
91, 12 Oct, 09:24:24, 0.014
92, 12 Oct, 09:25:24, 0.012
93, 12 Oct, 09:26:24, 0.012
94, 12 Oct, 09:27:24, 0.021
95, 12 Oct, 09:28:24, 0.030
96, 12 Oct, 09:29:24, 0.011
97, 12 Oct, 09:30:24, 0.012
98, 12 Oct, 09:31:24, 0.013
99, 12 Oct, 09:32:24, 0.013
100, 12 Oct, 09:33:24, 0.014
101, 12 Oct, 09:34:24, 0.011
102, 12 Oct, 09:35:24, 0.009
103, 12 Oct, 09:36:24, 0.012
104, 12 Oct, 09:37:24, 0.012
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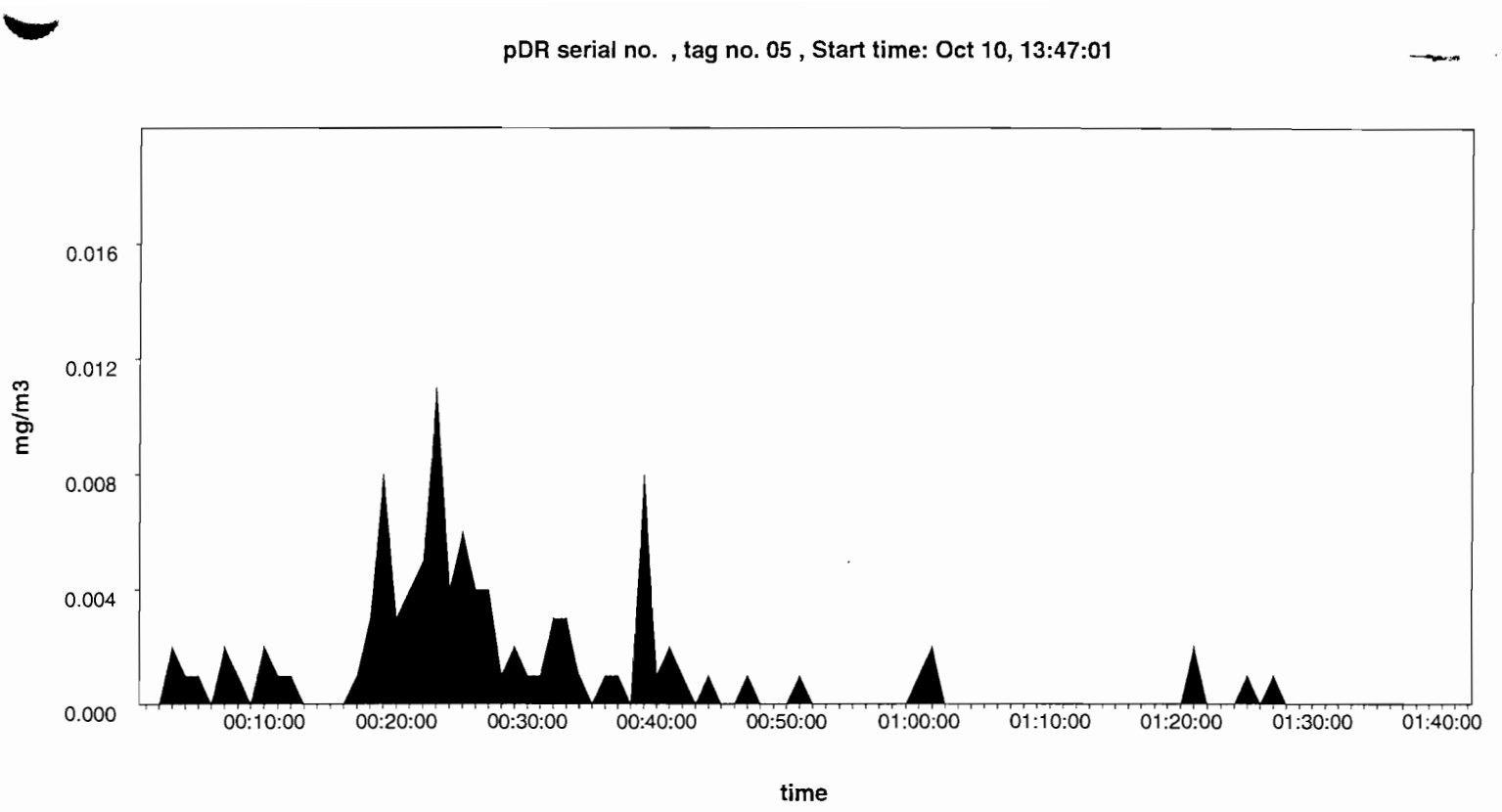
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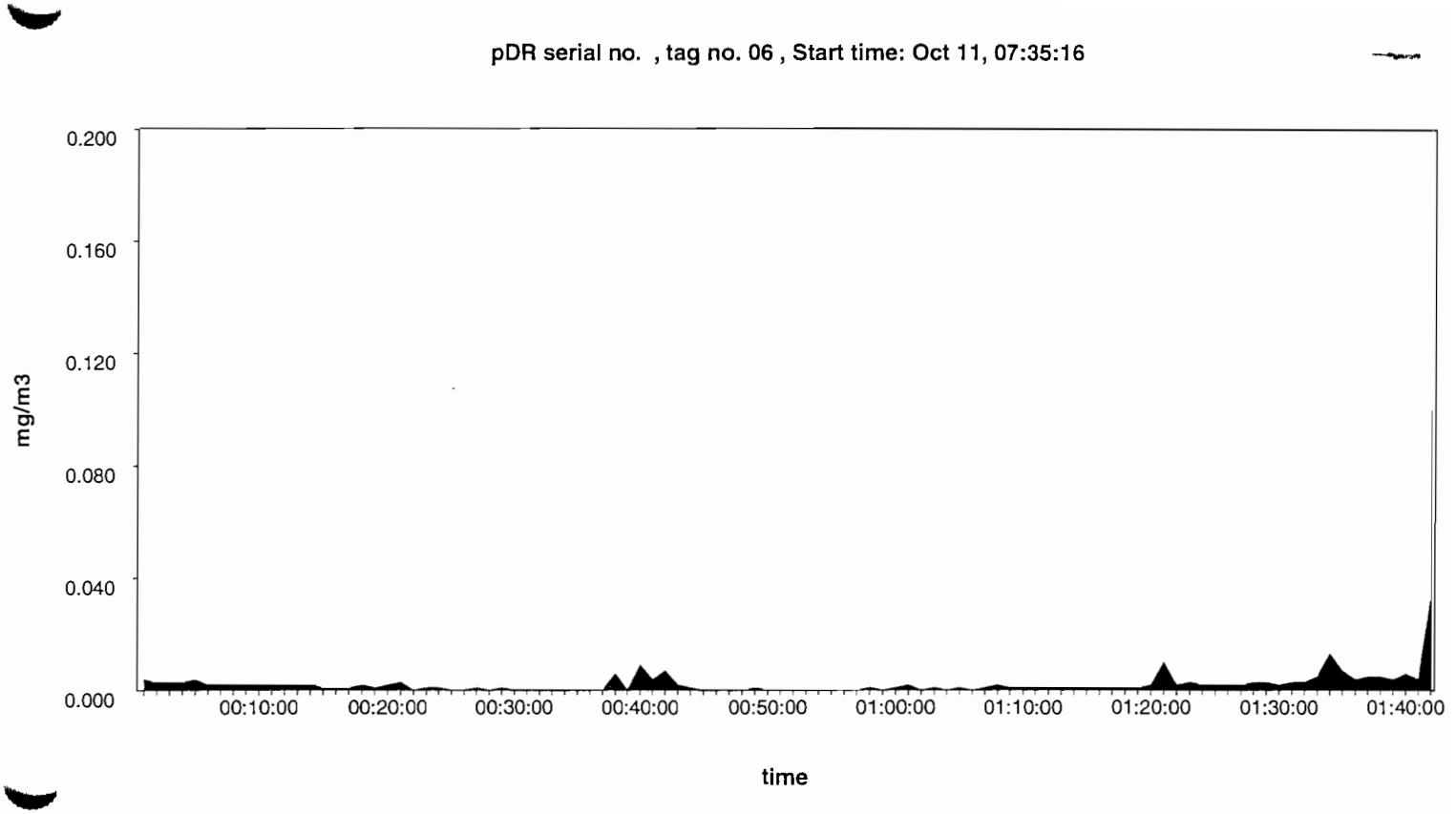
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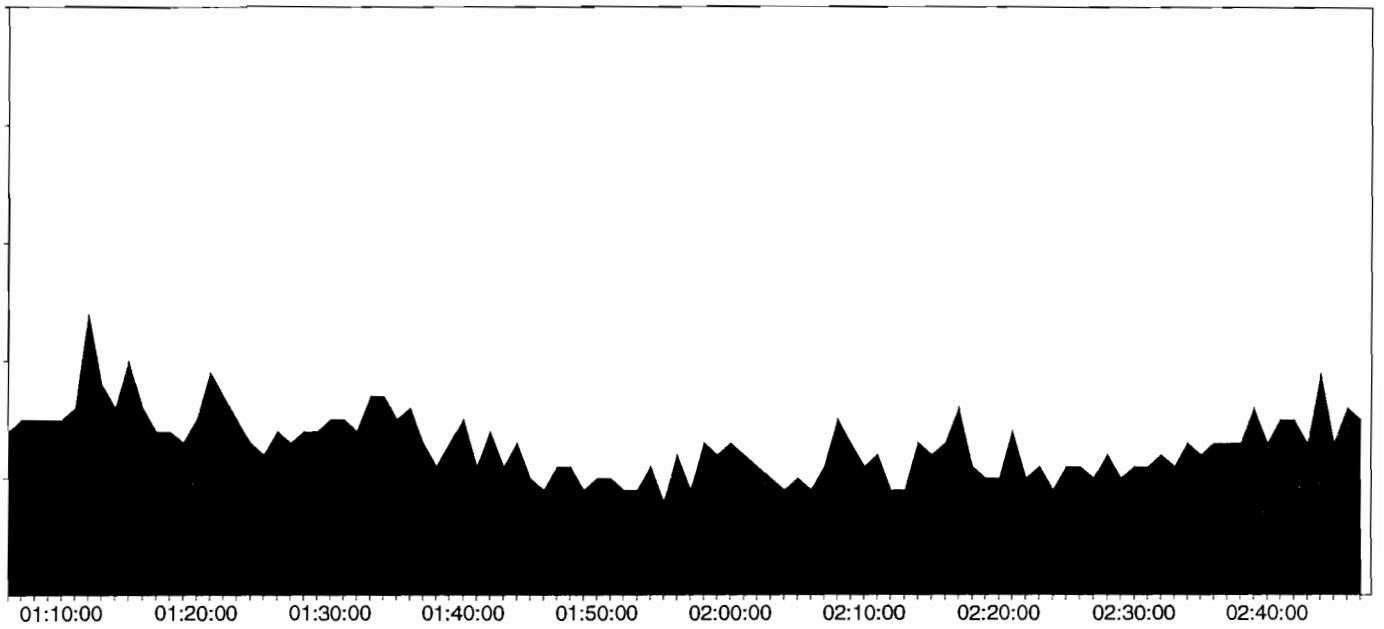
pDR serial no. , tag no. 07 , Start time: Oct 12, 08:07:59



pDR serial number: 2018
Tag Number: 02
Number of logged points: 236
Start time and date: 13:40:32 Oct 10
Elapsed time: 03:56:00
Logging period (sec): 60
Calibration Factor (%): 100
Max Display Concentration (mg/m3): 0.839
Max DC time: 16:58:18 Oct 10
Max STEL Concentration (mg/m3): 0.031
Max STEL time: 17:09:32 Oct 10
Overall AvgConc (mg/m3): 0.005

Point#, Date, Time, Avg (mg/m3)
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170, 10 Oct, 16:29:32, 0.003
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184, 10 Oct, 16:43:32, 0.003
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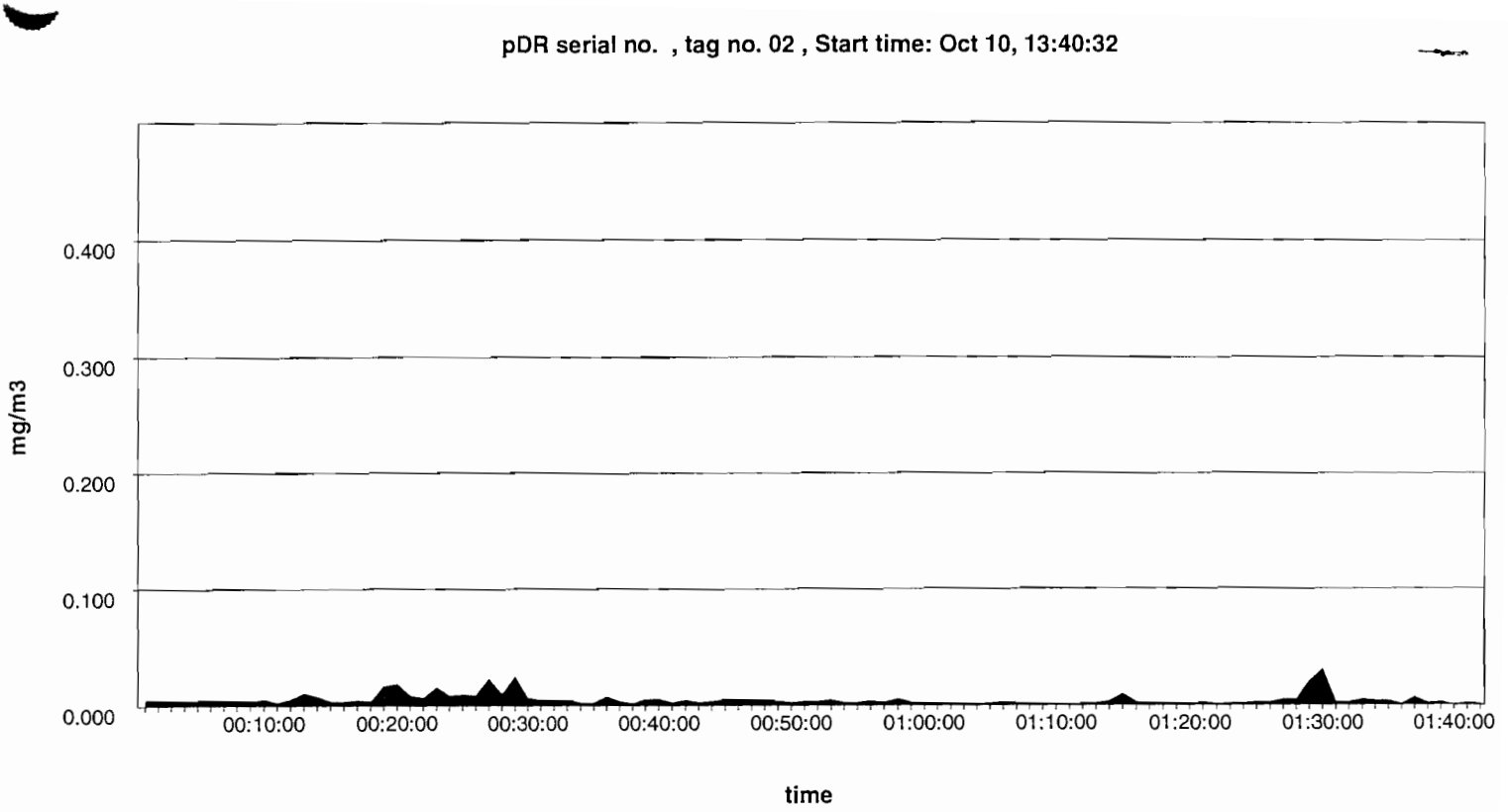
187, 10 Oct, 16:46:32, 0.002


pDR serial no. , tag no. 02 , Start time: Oct 10, 13:40:32
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0.300
0.200
0.100
0.000
mg/m3
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00:20:00
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00:40:00
00:50:00
01:00:00
01:10:00
01:20:00
01:30:00
01:40:00
time

pDR serial number: 2018
Tag Number: 03
Number of logged points: 599
Start time and date: 07:26:51 Oct 11
Elapsed time: 09:59:00
Logging period (sec): 60
[redacted]ration Factor (%): 100
Max Display Concentration (mg/m3): 0.246
Max DC time: 10:28:43 Oct 11
Max STEL Concentration (mg/m3): 0.020
Max STEL time: 13:44:51 Oct 11
Overall AvgConc (mg/m3): 0.005

Point#, Date, Time, Avg (mg/m3)
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4, 11 Oct, 07:29:51, 0.009
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6, 11 Oct, 07:31:51, 0.004
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8, 11 Oct, 07:33:51, 0.003
9, 11 Oct, 07:34:51, 0.003
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12, 11 Oct, 07:37:51, 0.001
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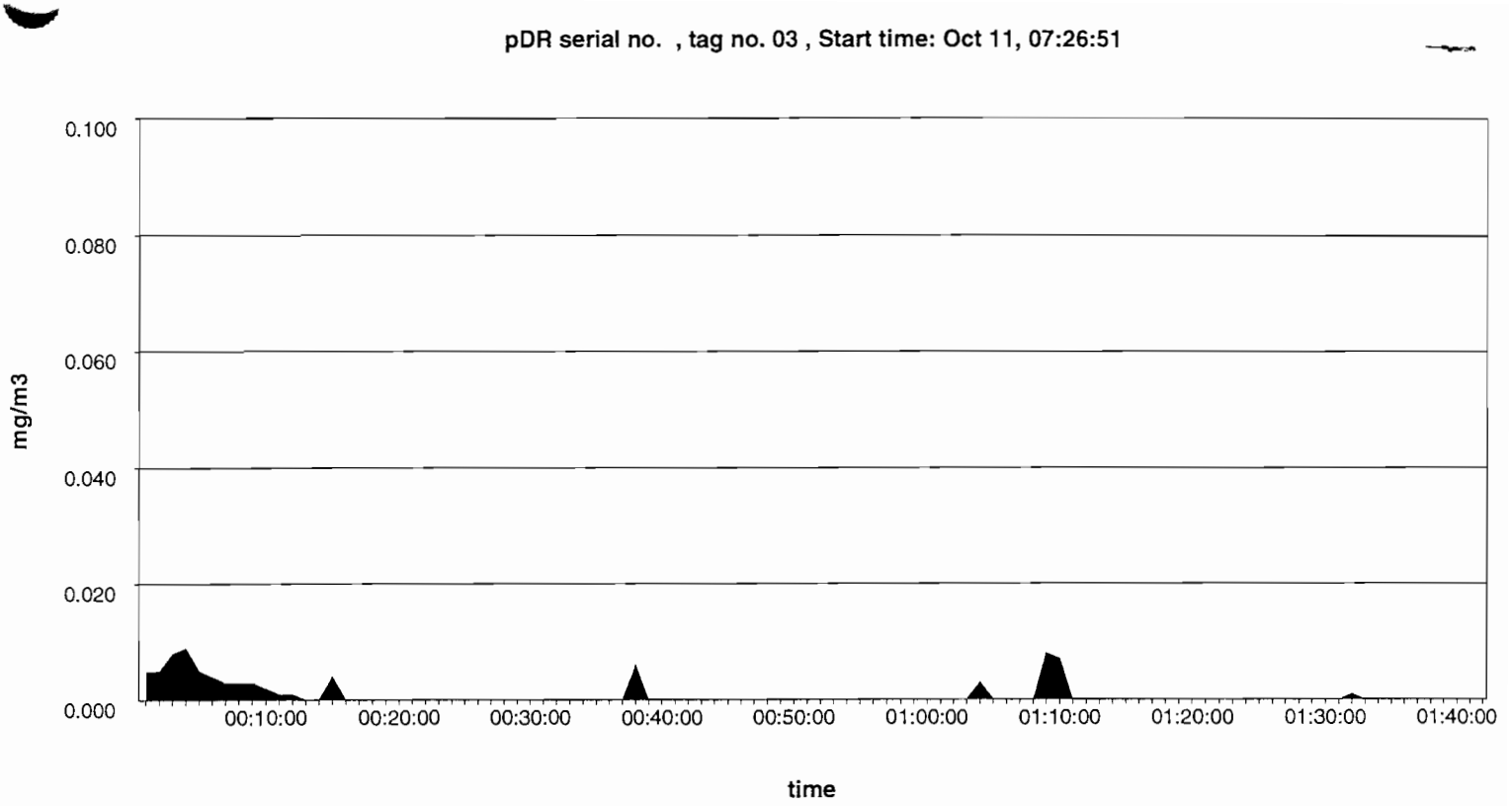
589, 11 Oct, 17:14:51, 0.003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0.060
0.040
0.020
0.000
mg/m3
00:10:00
00:20:00
00:30:00
00:40:00
00:50:00
01:00:00
01:10:00
01:20:00
01:30:00
01:40:00
time

pDR serial number: 2018
Tag Number: 04
Number of logged points: 543
Start time and date: 08:11:11 Oct 12
Elapsed time: 09:03:00
Lo[redacted]g period (sec): 60
C[redacted]ation Factor (%): 100
Max Display Concentration (mg/m3): 0.121
Max DC time: 10:17:22 Oct 12
Max STEL Concentration (mg/m3): 0.022
Max STEL time: 14:18:11 Oct 12
Overall AvgConc (mg/m3): 0.014

Point#, Date, Time, Avg (mg/m3)
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3, 12 Oct, 08:13:11, 0.008
4, 12 Oct, 08:14:11, 0.010
5, 12 Oct, 08:15:11, 0.016
6, 12 Oct, 08:16:11, 0.011
7, 12 Oct, 08:17:11, 0.013
8, 12 Oct, 08:18:11, 0.009
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14, 12 Oct, 08:24:11, 0.008
15, 12 Oct, 08:25:11, 0.008
16, 12 Oct, 08:26:11, 0.004
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53, 12 Oct, 09:03:11, 0.011

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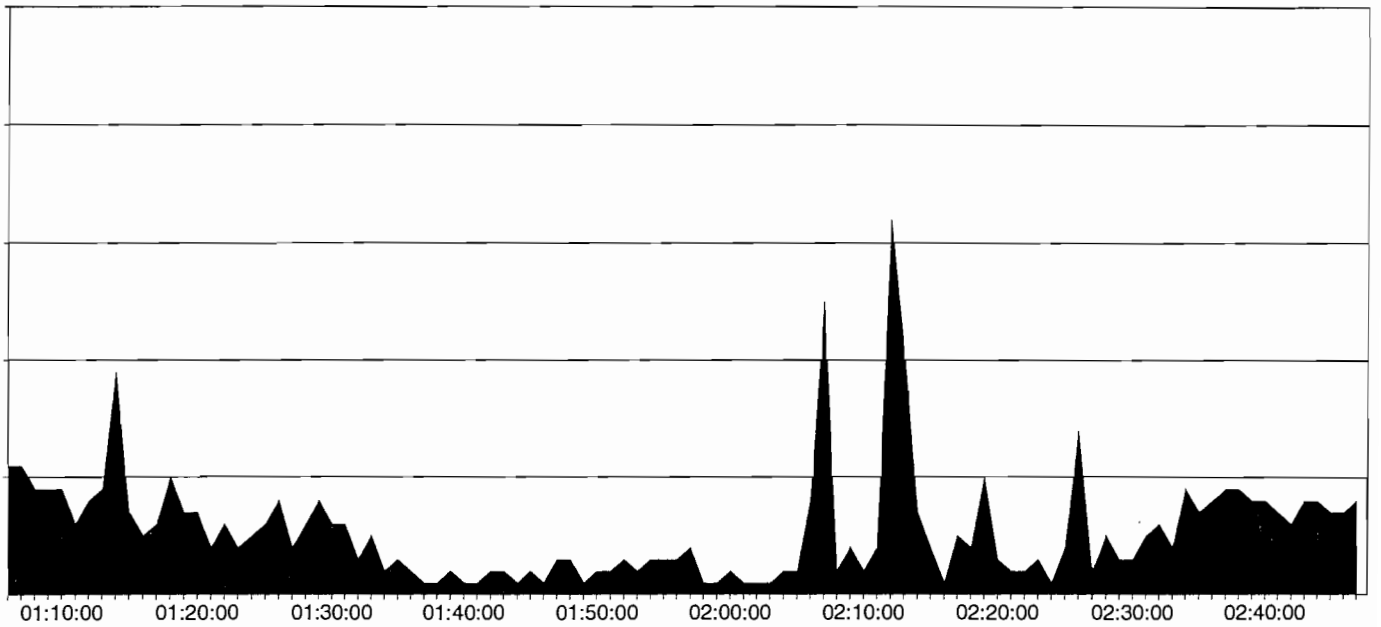


APPENDIX D

TEST PIT LOGS, SOIL BORING LOGS, WELL CONSTRUCTION DIAGRAMS AND ROCK CORE LOGS

TEST PIT LOG

EARTH TECH, INC.

12 METRO PARK ROAD

ALBANY, NEW YORK 12205 (518) 458-1313

DATE STARTED: 10/9/00 TIME: 1422 JOB NO.: 43015.01

DATE FINISHED: 10/9/00 TIME: 1555 TEST PIT NO.: TP-00-01

CLIENT: Wilsonart International, Inc. SITE: Congers, NY

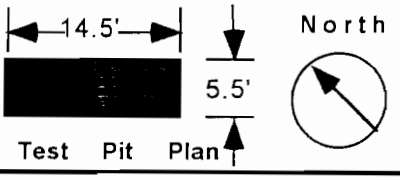
SURFACE ELEVATION: EXCAVATOR: MCES

DATUM: EQUIPMENT:

WATER ELEVATION: Not Encountered INSPECTOR:

DEPTH	SAMPLE NUMBER	DESCRIPTION OF SOIL	REMARKS
0	S-1		Background = 1.1 ppm Headspace (H.S.) = 3.7 ppm
	S-2	Lt Rdsh Br Cy$ s, f S, l(+) cmf(+) G; hard/ v dense; no odor; no stning; moist to dry (ML/GM/SM).	H.S. = 3.7 ppm
5	S-3		H.S. = 3.5 ppm/2.6 ppm
		(GLACIAL TILL) 6.2'	
		End of Pit @ 6.2' BGS Orientation = SE to NW Length = 14.5' Width = 5.5' Organic Vapors in Work Zone were 1.4 ppm - 3.6 ppm Organic Vapors at Perimeter were <1.8 ppm [Ave: 1.4 ppm]	

Notes:



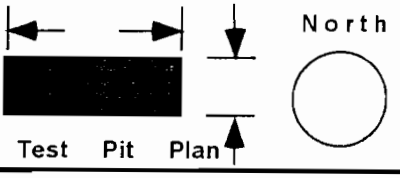
TEST PIT LOG

EARTH TECH, INC.
12 METRO PARK ROAD
ALBANY, NEW YORK 12205 (518) 458-1313

DATE STARTED: 10/10/00 TIME: 1145 JOB NO.: 43015.01
DATE FINISHED: 10/10/00 TIME: 1255 TEST PIT NO.: TP-00-02
CLIENT: Wilsonart International, Inc. SITE: Congers, NY
SURFACE ELEVATION: _____ EXCAVATOR: MCES
DATUM: Site EQUIPMENT: _____
WATER ELEVATION: Not Encountered INSPECTOR: _____

DEPTH	SAMPLE NUMBER	DESCRIPTION OF SOIL	REMARKS
0	S-1	Br-Rdsh Br Cy$ l, f S; l(-) f G; occ cbls; sbrded; occ rts; no odor; no stning; dry (ML/GM).	Background = 1.2 ppm Headspace (H.S.) = 3.0 ppm H.S. (Bucket)=1.9/2.4 ppm
	S-2	Br-Rdsh Br Cy$ s, f S, s(-) f G; occ cbl/bldr; hard/v dense; no odor; no stning; dry (ML/GM).	H.S. = 3.2 ppm H.S. (Bucket) = 2.2 ppm
5	S-3	Rdsh Br $&C s, f S, s(-) f G; cemented; hard/v dense; no odor; no stning; dry (ML/GM).	H.S. = 3.2 ppm H.S. (Bucket) = 3.4 ppm
	S-4		H.S. = 3.2 ppm H.S. (Bucket) = 2.4 ppm
		(GLACIAL TILL) 8.0'	
		End of Pit @ 8.0' BGS Orientation = W to E Width = 2.2' to 3.5' Length = 11' Organic Vapors in Work Zone are 1.1 - 1.2 ppm Organic Vapors in Perimeter range from 1.0 - 1.2 ppm	

Notes:



TEST PIT LOG

EARTH TECH, INC.

12 METRO PARK ROAD

ALBANY, NEW YORK 12205 (518) 458-1313

DATE STARTED: 10/9/00 TIME: 1615 JOB NO.: 43015.01

DATE FINISHED: 10/9/00 TIME: 1720 TEST PIT NO.: TP-00-03

CLIENT: Wilsonart International, Inc. SITE: Congers, NY

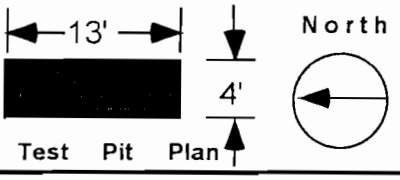
SURFACE ELEVATION: _____ EXCAVATOR: MCES

DATUM: _____ EQUIPMENT: _____

WATER ELEVATION: Not Encountered INSPECTOR: _____

DEPTH	SAMPLE NUMBER	DESCRIPTION OF SOIL	REMARKS
0	S-1	Dk Br O $ a, cmf G; freq rk frag & cbls; dense; moist.	Background = 1.1 ppm
		1.5'	Headspace (H.S.) = 7.0 ppm
		Leachfield Stone (White coarse Gravel; ang; sl sewage odor).	H.S.=6.3 ppm/2.3 ppm
	S-2		H.S. for Gravel layer was 4.9 ppm
		3.5'	
5	S-3	Br $ a, mf S, l cmf G; reworked/disturbed glacial till; med dense to dense; sl organic odor; no stning; wet to moist (ML/SM).	H.S.=5.3 ppm/3.4 ppm
	S-4	(FILL) 7.35'	
		Lt Rdsh Br Cy$ a , f S, s cmf G; occ cbls; hard/v dense; moist (ML/GM/SM). (GLACIAL TILL) 7.5'	H.S.=4.2 ppm/4.9 ppm
		End of Pit @ 7.5' BGS Orientation = East to West Width = 4' Length = 13' Organic Vapors in Work Zone were 1.6 ppm Organic Vapors at Perimeter were <1.4 ppm [1.0 - 1.4 ppm, Ave: 1.2 ppm]	Gravel encountered along southern and western walls but not at eastern walls.

Notes:



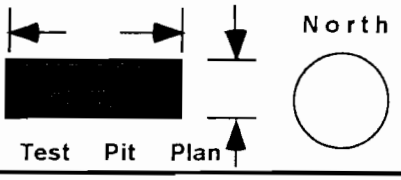
TEST PIT LOG

EARTH TECH, INC.
12 METRO PARK ROAD
ALBANY, NEW YORK 12205 (518) 458-1313

DATE STARTED: 10/10/00 TIME: 1330 JOB NO.: 43015.01
DATE FINISHED: 10/10/00 TIME: 1425 TEST PIT NO.: TP-00-04
CLIENT: Wilsonart International, Inc. SITE: Congers, NY
SURFACE ELEVATION: _____ EXCAVATOR: MCES
DATUM: Site EQUIPMENT: _____
WATER ELEVATION: Not Encountered INSPECTOR: Skip Delclos

DEPTH	SAMPLE NUMBER	DESCRIPTION OF SOIL	REMARKS
0	S-1	Br-Rdsh Br, Cy$, mf S, l cmf G; med dense to dense; no odor; no staining; moist; occ brk pieces.	Background=1.3 ppm Headspace (H.S.) = 3.2 ppm
	S-2		H.S. = 4.1 ppm
5	S-3		H.S. = 5.3 ppm 1.7 ppm @ 5.5' BGS
	S-4	7.0'	H.S. = 5.5 ppm 2 ppm @ 7.5' BGS
		Rdsh Br $&C s, f S, s(-) f G; cemented; hard/very dense; no odor or staining; dry. (GLACIAL TILL) 8.0'	
		End of Pit @ 8.0' BGS Orientation: NW to SE Length = 12' Width = 2.5' Depth = 8.0'	

Notes:



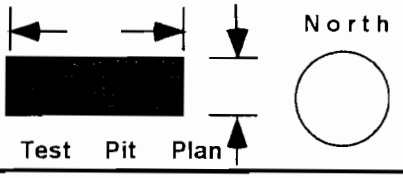
TEST PIT LOG

EARTH TECH, INC.
12 METRO PARK ROAD
ALBANY, NEW YORK 12205 (518) 458-1313

DATE STARTED: 10/10/00 TIME: 1508 JOB NO.: 43015.01
DATE FINISHED: 10/10/00 TIME: 1555 TEST PIT NO.: TP-00-05
CLIENT: Wilsonart International, Inc. SITE: Congers, NY
SURFACE ELEVATION: EXCAVATOR: MCES
DATUM: Site EQUIPMENT:
WATER ELEVATION: Not Encountered INSPECTOR: Skip Delclos

DEPTH	SAMPLE NUMBER	DESCRIPTION OF SOIL	REMARKS
0	S-1		Background = 1.4 ppm Headspace (H.S.) = 4.5 ppm
	S-2	Br-Rdsh Br Cy$ s, mf S, l cmf G; med dense to dense; no odor; no staining; moist; occ brk pieces.	H.S. = 4.2 ppm
5	S-3		H.S. = 5.8 ppm
	S-4		H.S. = 5.4 ppm H.S. = 1.7 ppm @ 6' BGS
		(FILL) 7.0'	
		Rdsh Br $&C s, f S, s(-) f G; cemented; hard/very dense; no odor or staining; dry.	
		(GLACIAL TILL) 8.0'	
		End of Pit @ 8.0' BGS Orientation: NW to SE Length = 13' Width = 2.5' Depth = 8.0'	

Notes:



Earth Tech, Inc. Albany, NY (518) 458-1313	**Test Boring Log**				**Boring No. MW-7**
PROJECT: Voluntary Investigation					Sheet 1 of 2
CLIENT: Wilsonart International, Inc.					Job No. 43015.01
DRILLING CONTRACTOR: Parratt Wolff, Inc.					Meas. Pt. Elev.: 194.76'
PURPOSE: Environmental Monitoring					Ground Elev.: 192.7'
DRILLING METHOD: Hollow Stem Auger		SAMPLE	CORE	CASING	Datum: Site Datum
DRILL RIG TYPE: B-57	TYPE	SS	HX	HW	Date Started: 10/11/00
GROUNDWATER DEPTH: 25.18'	DIAM.	2 " O.D.	3 7/8" O.D.	4"	Date Finished: 10/11/00
MEAS. PT.: PVC	WEIGHT	140#	Background = 1.6 ppm		Driller: Glen Lansing
DATE OF MEAS.: 10/16/00	FALL	30"			Inspector: Mark Williams

Depth (Feet)	Sample Number	Blow Count	Unified Classif-ication	Graphic Log	GEOLOGIC DESCRIPTION	Remarks	HS	Perimeter	WorkZone	Middle
1238	S-1	3 5 3 6	ML/SM		Br-RdBr Cy$ l(-), f S mod stiff; med dense; no odor; no stning; moist (ML/SM).	Rec = 0.3' Moist	5.8	1.7	1.7	1.7
1241	S-2	23 40 50/.2'	ML/GM		Br-RdBr Cy$ s(-), f S, l mf G; rk @ end of spoon; no odor; no stning; v dense/hard; moist (ML/GM).	Rec = 0.3' Moist	6.2	1.7	1.7	1.7
1243	S-3	35 38 36 44	ML/GM		Rd-Br to Br Cy$ s, f S, l(+) mf G; no odor; no stning; hard/v dense; cobbly; moist to dry (ML/GM).	Rec = 0.6' Moist to Dry	8.6	1.7	1.7	1.7
1245	S-4	43 50/.3'	ML/SM/GM		Br Cy$ l(+), f S, t(-) mf G; freq rk chps; no odor; no stning; hard/ v dense; v cobbly; dry (ML/SM/GM).	Rec = 0.6' Dry	9.5	1.7	1.7	1.7
1300	S-5	26 25 50/.4'	ML/SC		Rd Br C&$ a, f S, t(+) f G; occ to freq cbls/pbls/bldrs; hard/v dense; dry (ML/SC).	Rec=0.65' Dry	9.7	1.7	1.6	1.7

Earth Tech, Inc. Albany, NY (518) 458-1313	**Test Boring Log**	Boring No. MW-7
PROJECT: Voluntary Investigation		Sheet 2 of 2
CLIENT: Wilsonart International, Inc.		Job No. 43015.01

Depth (Feet)	Sample Number	Blow Counts	Unified Classif-ication	Graphic Log	Geologic Description	Remarks	HS	Perimeter	WorkZone	Middle
10	S-6	45 50/.1'	—		Cuttings: Br Cy$ s, f S, l mf(+) G; occ gneiss & Brunswick Fm rk pieces; hard/v dense; dry.	Rec = NR	—	1.7	1.7	1.7
12	S-7	26 50/.1'	ML/SM		Br $ s, mf(+) S, t f G; occ cemented $ stone/SS rk pieces; no odor; no stning; hard/v dense; moist to dry (ML/SM).	Rec=0.25' Moist to Dry	9.3	1.7	1.7	1.7
14	S-8	50/.1'	ML/SM		Same (ML/SM). (GLACIAL TILL) 14.5' [178.20'] BEDROCK	Rec=0.05' Moist	10.8	1.4	1.5	1.5
16						* See Core Log MW-7 for additional geologic and environmental description (14.5' to 41.0' BGS). * See Monitoring Well Completion Log MW-7 for well construction details (Screen set @ 20.90' to 40.90' BGS).				

1328

Earth Tech, Inc. Albany, NY (518) 458-1313	Test Boring Log	Boring No. MW-8
PROJECT: Voluntary Investigation		Sheet 1 of 2
CLIENT: Wilsonart International, Inc.		Job No. 43015.01
DRILLING CONTRACTOR: Parratt Wolff, Inc.		Meas. Pt. Elev.: 197.58'
PURPOSE: Environmental Monitoring		Ground Elev.: 195.7'

DRILLING METHOD: Hollow Stem Auger/ HX Core		SAMPLE	CORE	CASING	Datum: Site Datum
DRILL RIG TYPE: B-57	TYPE	SS	HX	HW	Date Started: 10/10/00
GROUNDWATER DEPTH: 26.86'	DIAM.	2 " O.D.	3 7/8" O.D.	4"	Date Finished: 10/11/00
MEAS. PT.: Top of PVC	WEIGHT	140#	Background = 1.3 ppm		Driller: Glen Lansing
DATE OF MEAS.: 10/16/00	FALL	30"			Inspector: Mark Williams

Depth (Feet)	Sample Number	Blow Count	Unified Classif-ication	Graphic Log	GEOLOGIC DESCRIPTION	Remarks	H.S.	WorkZone	Perimeter	Cuttings
755	S-1	7 17 21 36	ML/SM/GM		Rdsh Br O Cy$ l(+), f S, t(+) f G; occ to freq cbls & bldrs; occ rts; no odor; no stning; stiff/dense; dry (ML/SM/GM).	Rec=1.65' Dry	4.2	1.1/1.4	1.0/1.4	1.7
802	S-2	27 54 50/.3'	ML/SM		Lt Br $ s, f S, t f G; cbls; no odor; no stning; hard/v dense; dry (ML/SM).	Rec = 0.9' Dry	4.7	1.4	1.4	1.7
828	S-3	22 32 23 25	ML/SM		Br-Rd Br $ s, f S, t mf G; occ to freq cbls; no odor; no stning; v stiff/dense; dry (ML/SM).	Rec=1.25' Dry	4.2	1.8	1.7	1.9-3.6
832	S-4	12 28 32 37	ML/SM/GM		Br Cy$ l(+), f S, l(-) f G; occ to freq pbls/cbls/bldrs; no odor; no stning; hard/v dense; dry (ML/SM/GM).	Rec = 1.6' Dry	4.0	1.8	1.7	3.6
836	S-5	34 50/.4'	ML/SM		Rd Br Cy$ s(-), f S, t f G; freq cbls/bldrs; no odor; no stning; hard/v dense; dry (ML/SM).	Rec = 0.6' Dry	4.1	1.9	1.9	4.1
					(GLACIAL TILL)					

Earth Tech, Inc.
Albany, NY (518) 458-1313

Test Boring Log

Boring No. MW-8

Sheet 2 of 2

PROJECT: Voluntary Investigation

Job No. 43015.01

CLIENT: Wilsonart International, Inc.

Depth (Feet)	Sample Number	Blow Counts	Unified Classif-ication	Graphic Log	Geologic Description	Remarks	H.S.	WrkZone	Perimeter	Cuttings
10	S-6	20	SM		Br-Rdsh Br $ a, f S, t(+) f G; occ to freq cbls and/or bldrs; no odor; no stning; dry.	Rec = 1.6' Dry	4.1	1.6	1.6	3.7
		30								
		28								
12		24								
	S-7	16			Br-Rdsh Br mf(+) S, a(-) $, t(+) f G; occ to freq cbls and/or bldrs; no odor; no stning; dense to v dense; dry (SM).	Rec=1.25' Dry	4.5	1.6	1.6	3.8
925		20								
		35								
		34								
14	S-8	50/.3'			Rock [Gneiss fragment lodged at end of spoon.]		1.3	1.4	1.4	1.4
					BOULDERY; ROCK RUBBLE (14.3' - 17.1' BGS)					
16										
18	S-9	50/.1'			(GLACIAL TILL) 18.0' [177.68']					
					Reddish fine-grained SANDSTONE chips; weathered; moist to dry.					
20	S-10	50/0			(BEDROCK) 20.0' [175.68'] Same. End of Boring					

* See Core Log MW-8 for additional geologic and environmental description [20.0' - 45.0' BGS].

* See Monitoring Well Completion Log MW-8 for additional well construction details [Screened Interval @ 24.33' - 44.33' BGS].

Earth Tech, Inc. Albany, NY (518) 458-1313	**Test Boring Log**				Boring No. MW-9
PROJECT: Voluntary Investigation					Sheet 1 of 2
CLIENT: Wilsonart International, Inc.					Job No. 43015.01
DRILLING CONTRACTOR: Parratt Wolff, Inc.					Meas. Pt. Elev.: 170.30'
PURPOSE: Environmental Monitoring					Ground Elev.: 168.70'
DRILLING METHOD: HW Casing		SAMPLE	CORE	CASING	Datum: Site Datum
DRILL RIG TYPE: B-57	TYPE	SS	HX	HW	Date Started: 10/12/00
GROUNDWATER DEPTH: 8.60'	DIAM.	2 " O.D.	3 7/8" O.D.	4"	Date Finished: 10/13/00
MEAS. PT.: Top of PVC	WEIGHT	140#	Background = 1.4 ppm		Driller: Glen Lansing
DATE OF MEAS.: 10/16/00	FALL	30"			Inspector: Mark Williams

Depth (Feet)	Sample Number	Blow Count	Unified Classif-ication	Graphic Log	GEOLOGIC DESCRIPTION	Remarks	HS	WorkZone	Perimeter
1044	S-1	3 4 5 5	ML		Med Br O Cy$ l(+), f G; mod stiff; no odor; no stning; moist (ML).	Rec=0.75' Moist	9.3	1.6	1.5/1.7
	S-2	4 4 5 5	ML		Med Br O C&$ l(-), f G; mod stiff; no odor; no stning; moist (ML).	Rec = 0.9' Moist	6.4	1.6	1.5
5	S-3	3 3 28 23	ML		Br $&C; mod stiff to v stiff; no odor; no stning; wet to moist (ML).	Rec=1.88' Wet to Moist	5.8	1.6	1.7/1.4
	S-4	8 14 15 21	ML/CL		Br C&$; mod stiff; no odor; no stning; moist to wet (ML/CL).	Rec=1.45' Moist to Wet	7.2	1.6	1.7/1.5/1.4
	S-5	18 25 26	ML		Br C&$ l(-), f S.	Rec=0.73' Moist to Wet	7.7	1.6	1.7/1.5
10		28			(ALLUVIUM) 9.67' (GLACIAL TILL) [159.01']				

Earth Tech, Inc. Albany, NY (518) 458-1313	**Test Boring Log**	Boring No. MW-9
PROJECT: Voluntary Investigation		Sheet 2 of 2
CLIENT: Wilsonart International, Inc.		Job No. 43015.01

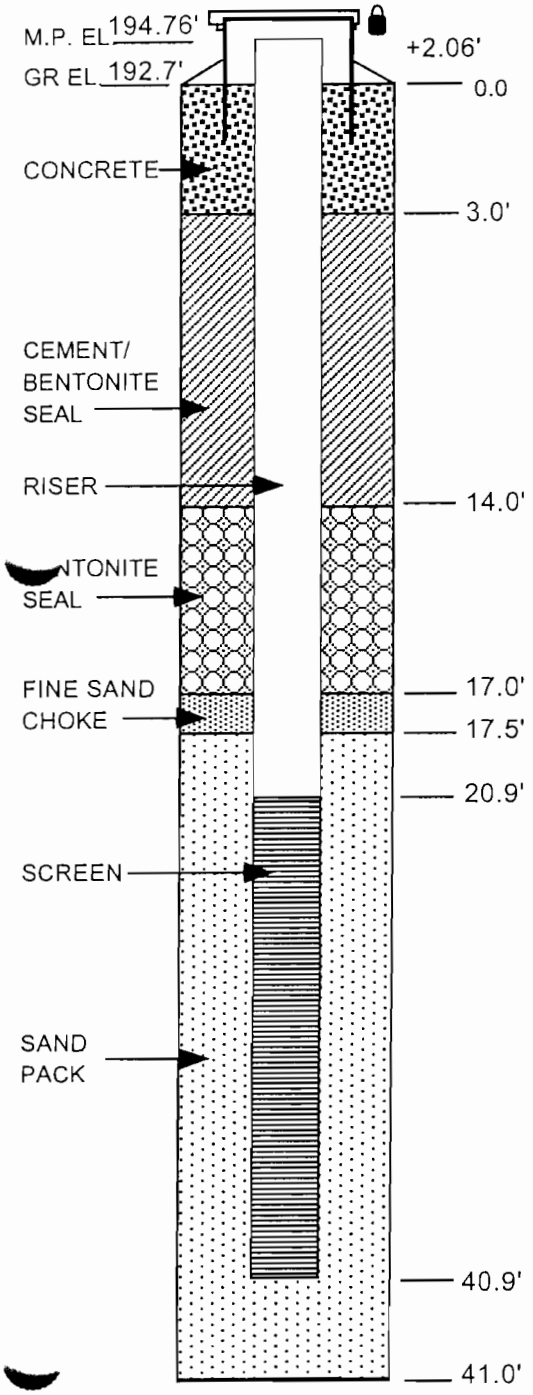
Depth (Feet)	Sample Number	Blow Counts	Unified Classif-ication	Graphic Log	Geologic Description	Remarks	HS	WorkZone	Perimeter
10	S-6	39 30 20 16	ML/SM/GM		Br-Rdsh Br Cy$ s(-), mf(+) S, l mf(+) G; v stiff/v dense; no odor; no stning; moist to wet (ML/SM/GM).	Rec=1.55' Moist to Wet	7.4	1.4	1.3
12	S-7	16 30 16 17	ML/SM/GM		Br-Rdsh Br Cy$ s, mf S, l(+) mf(+) G; v stiff/dense; no odor; no stning; moist to wet (ML/SM/GM).	Rec = 1.3' Moist to Wet	6.7	1.4	1.3
14	S-8	12 13 12 11	ML/GM/SM		Br Cy$ a, f S, s mf(+) G; occ rk fgmt; stiff/med dense; no odor; no stning; wet (ML/GM/SM).	Rec = 1.4' Wet	9.6	1.4	1.4
16	S-9	18 41 41 44				Rec = 1.7' Wet	8.1	1.4	1.3
18		75/0.2'			(GLACIAL TILL) 17.0' [151.68'] Rd Br fine-grained SANDSTONE with minor silt; v dense; weathered. Same BEDROCK	* See Core Log MW-9 for additional geologic and environmental description. * See Well Completion Log MW-9 for additional well construction details [Screened Interval = 20.93' - 30.93']			

MONITORING WELL COMPLETION LOG WELL NO. MW-7

Earth Tech, Inc.
12 Metro Park Road
Albany, NY 12205
(518) 458-1313

Project: Former Wilsonart Warehouse
Client: Wilsonart International, Inc.
Location: Congers, NY
Project No.: 43015.01
Date Drilled: 10/11/00
Date Developed: 10/16/00

WELL CONSTRUCTION DETAIL



NOT TO SCALE

INSPECTION NOTES

Inspector: Mark Williams
Drilling Contractor: Parratt-Wolff, Inc.

Type of Well: Environmental
Static Water Level: 25.18' Date: 10/16/00
Measuring Point (M.P.): Top of PVC
Total Depth of Well: 41.0' BGS

Drilling Method
Type: HSA/Air Rotary Diameter: 4 1/4" I.D./4" I.D.
Casing: Steel

Sampling Method
Type: Split-Spoon Diameter: 2" O.D.
Weight: 140# Fall: 30"
Interval: Continuous

Riser Pipe Left in Place
Material: Sch 40 PVC Diameter: 2" I.D.
Length: 22.96' Joint Type: Flush Threaded

Screen
Material: Sch 40 PVC Diameter: 2" I.D.
Slot Size: 0.01" Length: 20'
Stratigraphic Unit Screened: Bedrock (Brunswick Formation)

Filter Pack
Sand: X Gravel: Natural:
Grade: 00 Unimin/0 Unimin
Amount: Fine Sand Interval: 17.0' - 17.5'
Sand 17.5' - 41.0'

Seal(s)
Type: Bentonite Interval: 14.0' - 17.0' BGS
Type: Cement-Bentonite 1 Interval: 3.0' - 14.0' BGS
Type: Interval:

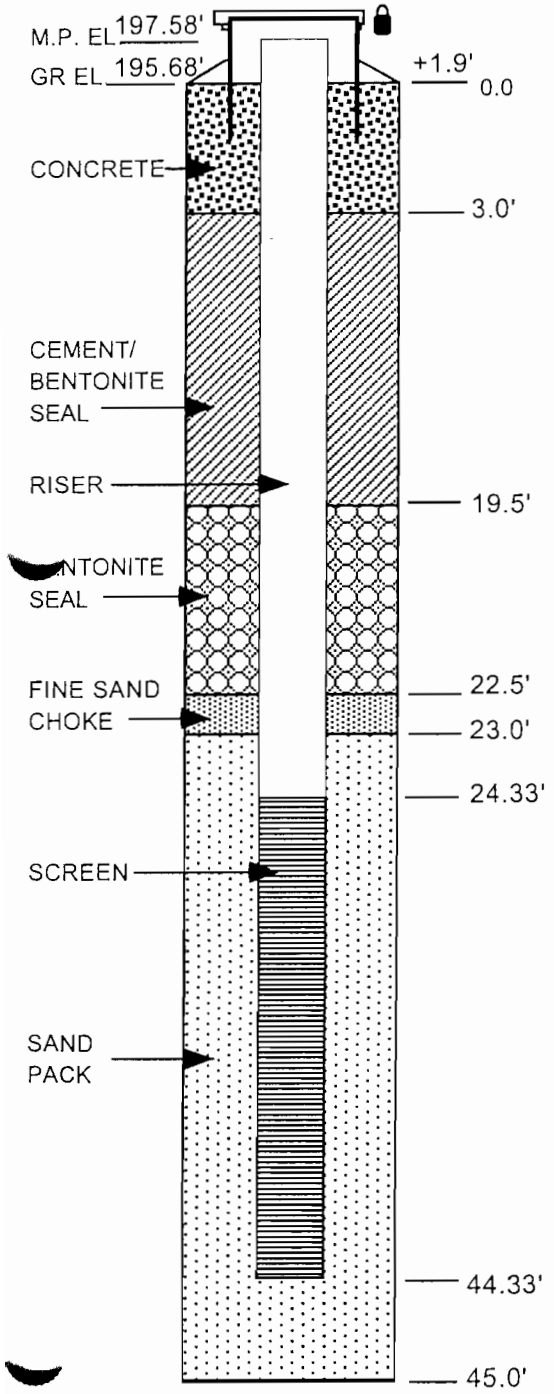
Locking Casing ☒ Yes ☐ No
Notes:

MONITORING WELL COMPLETION LOG WELL NO. MW-8

Earth Tech, Inc.
12 Metro Park Road
Albany, NY 12205
(518) 458-1313

Project: Former Wilsonart Warehouse
Client: Wilsonart International, Inc.
Location: Congers, NY
Project No.: 43015.01
Date Drilled: 10/11/00
Date Developed: 10/16/00

WELL CONSTRUCTION DETAIL



NOT TO SCALE

INSPECTION NOTES

Inspector: Mark Williams
Drilling Contractor: Parratt-Wolff, Inc.

Type of Well: Environmental
Static Water Level: 26.86' Date: 10/16/00
Measuring Point (M.P.): Top of PVC
Total Depth of Well: 45.0' BGS

Drilling Method
Type: HSA/Air Rotary Diameter: 4 1/4" I.D./4" I.D.
Casing: Steel

Sampling Method
Type: Split-Spoon Diameter: 2" O.D.
Weight: 140# Fall: 30"
Interval: Continuous

Riser Pipe Left in Place
Material: Sch 40 PVC Diameter: 2" I.D.
Length: 26.23' Joint Type: Flush Threaded

Screen
Material: Sch 40 PVC Diameter: 2" I.D.
Slot Size: 0.01" Length: 20'
Stratigraphic Unit Screened: Bedrock (Brunswick Formation)

Filter Pack
Sand: X Gravel: Natural:
Grade: 00 Unimin/0 Unimin
Amount: Fine Sand Interval: 22.5' - 23.0'
Sand 23.0' - 45.0'

Seal(s)
Type: Bentonite Interval: 19.5' - 22.5'
Type: Cement-Bentonite 1 Interval: 3.0' - 19.5'
Type: Interval:

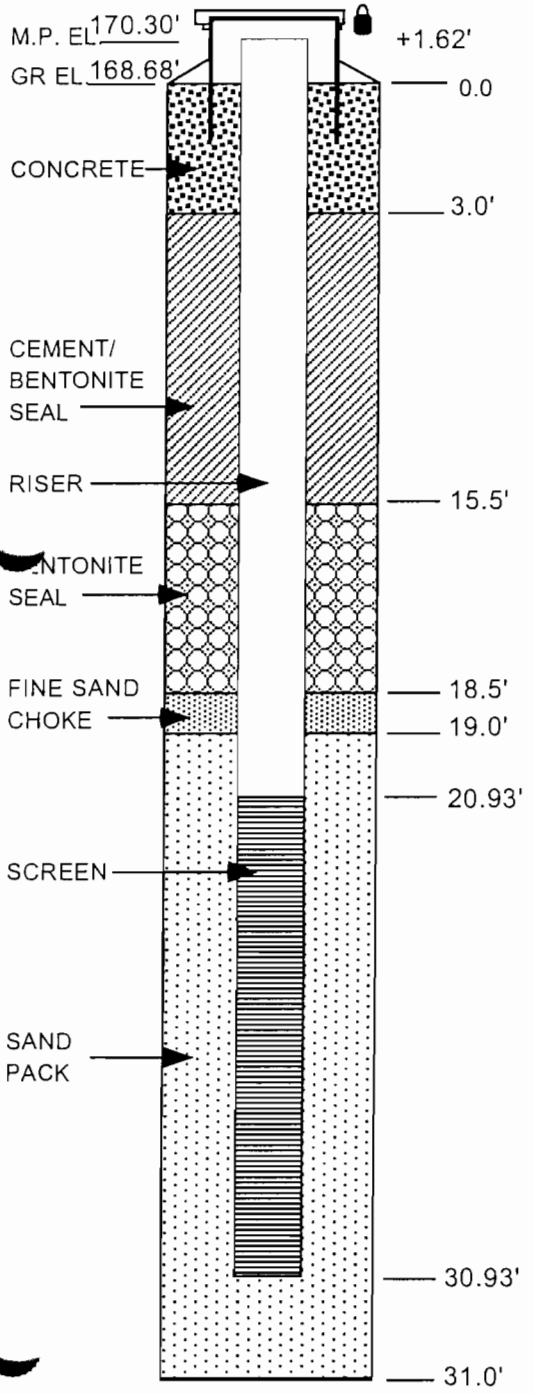
Locking Casing ☒ Yes ☐ No
Notes:

MONITORING WELL COMPLETION LOG WELL NO. MW-9

Earth Tech, Inc.
12 Metro Park Road
Albany, NY 12205
(518) 458-1313

Project: Former Wilsonart Warehouse
Client: Wilsonart International, Inc.
Location: Congers, NY
Project No.: 43015.01
Date Drilled: 10/12/00-10/13/00
Date Developed: 10/16/00

WELL CONSTRUCTION DETAIL



NOT TO SCALE

INSPECTION NOTES

Inspector: Mark Williams
Drilling Contractor: Parratt-Wolff, Inc.

Type of Well: Environmental
Static Water Level: 8.60' Date: 10/16/00
Measuring Point (M.P.): Top of PVC
Total Depth of Well: 31.0' BGS

Drilling Method
Type: HSA Diameter: 4 1/4" I.D./4" I.D.
Casing: Steel

Sampling Method
Type: Split-Spoon Diameter: 2" O.D.
Weight: 140# Fall: 30"
Interval: Continuous

Riser Pipe Left in Place
Material: Sch 40 PVC Diameter: 2" I.D.
Length: 21.55' Joint Type: Flush Threaded

Screen
Material: Sch 40 PVC Diameter: 2" I.D.
Slot Size: 0.01" Length: 10'
Stratigraphic Unit Screened: Bedrock (Brunswick Formation)

Filter Pack
Sand: X Gravel: Natural:
Grade: 00 Unimin 00 Unimin
Amount: Fine Sand Interval: 18.5' - 19.0'
Sand 19.0' - 31.0'

Seal(s)
Type: Bentonite Interval: 15.5' - 18.5'
Type: Cement-Bentonite 1 Interval: 3.0' - 15.5'
Type: Interval:

Locking Casing ☒ Yes ☐ No
Notes:

Earth Tech, Inc. 12 Metro Park Road Albany, New York 12205	**CORE LOG**	Hole No.: MW-7	Job No.: 43015.01
		Sheet 1 of 5	Date Started: 10/11/00
Project: Former Wilsonart Warehouse	Drilling Contractor: Parratt-Wolff, Inc.		Date Finished:
Client: Wilsonart International, Inc.	Driller: Glenn Lansing		Total Depth: 41.0'
Purpose: Environmental Monitoring	Geologist: Skip Delclos		MP Elev.: 194.76'
Location: Congers, NY	Length of Casing:		S.W.L.: 25.18' (PVC)
Hole Location:	Casing Size: / Core Size: 4.0" / Inclination/Bearing:		on 10/16/00

FORMATION / MEMBER / Zone/Unit	Graphic Log	Depth Scale	Lithologic Description (include in order: ROCK TYPE, color, grain size, texture, bedding, fracture & minerals, [178.2']	Bedding Angle	Percent Recovery
Brunswick / Trba		15.5'	14.5' - 15.3' Medium to coarse-grained Sandstone, Red Brown, cross-bedded with clasts up to 1/2 inch, clasts are quartz, mica & feldspar, arkosic, no fractures, weakly cemented, porous.	0 - 5°	75
			15.3' - 15.6' Siltstone with fine Sand, Red Brown, some isolated clasts.		
		16.5'	15.6' - 16.0' Very fine to fine-grained Sandstone with Silt, Red Brown, cross bedded, some low angle fractures along depositional boundaries; moderately cemented.		95
		17.5'	16.0' - 21.0' Fine to medium-grained Sandstone some Silt, Red Brown, cross-bedded, some fractures (mostly low angle), some Gray to Greenish Gray "chips" of Sand/Siltstone; moderately cemented.		
		18.5'	Run No. 1: 14.5' - 16.0' BGS; Rec = 1.4'; HX Core @ 2-3 minutes per foot; Bkgd = 1.5 ppm; H.S. = 2.1 ppm.		
			Run No. 2: 16.0' - 21.0' BGS; Rec = 5.0'; HX Core @ 3-4 minutes per foot; Bkgd = 1.5 ppm; H.S. = 2.3 ppm.		
		19.5'	(Brunswick Formation)		

Earth Tech, Inc.
12 Metro Park Road
Albany, New York 12205

CORE LOG

Hole No.: MW-7
Sheet 2 of 5

Job No.: 43015.01

Project: Former Wilsonart Warehouse

Client: Wilsonart International, Inc.

FORMATION / MEMBER / Zone/Unit	Graphic Log	Depth Scale	Lithologic Description (include in order: ROCK TYPE, color, grain size, texture, bedding, fracture & minerals,	Bedding Angle	Percent Recovery
Brunswick / Trba	Silt filled fracture	20.5'	Run No. 3: 21.0' - 24.0' BGS; Rec = 3.0'; HX Core @ 3-4 minutes per foot; Bkgd = 1.5 ppm; H.S. = 2.7 ppm.	0 - 5°	95
			21.0' - 24.0' Medium to coarse-grained Sandstone, Gray to Gray-Brown, cross-bedded with clasts up to 1/2 inch, arkosic with some feldspar clasts, silt seams (filled fractures) moderately cemented; core blockage @ 24.0' BGS; lost water return @ 24.0' BGS.		
		21.5'			
		22.5'			
			Water level = 23.12' BGS (10/16/00).		
		23.5'			
	Vertical fracture				
			Run No. 4: 24.0' - 26.0' BGS; Rec = 2.0'; HX Core @ 3-4 minutes per foot; Bkgd = 1.5 ppm; H.S. = 2.4 ppm.		
		24.5'	24.0' - 28.0' Fine to medium-grained Sandstone some Silt; Red Brown; cross-bedded with some isolated clasts; some low angle fractures; moderately cemented.		
		25.5'	(Brunswick Formation)		

Earth Tech, Inc.
12 Metro Park Road
Albany, New York 12205

CORE LOG

Hole No.: MW-7
Sheet 3 of 5

Job No.: 43015.01

Project: Former Wilsonart Warehouse

Client: Wilsonart International, Inc.

FORMATION / MEMBER / Zone/Unit	Graphic Log	Depth Scale	Lithologic Description (include in order: ROCK TYPE, color, grain size, texture, bedding, fracture & minerals,	Bedding Angle	Percent Recovery
Brunswick / Trba		25.5'		0 - 5°	95
			Run No. 5: 26.0' - 31.0' BGS; Rec = 5.0'; HX Core @ 3-5 minutes per foot; Bkgd = 1.5 ppm; H.S. = 2.3 ppm.		
		26.5'			
		27.5'			
			28.0' - 28.4' Medium to coarse-grained Sandstone; Greenish Gray to Gray Brown; cross-bedded with clasts up to 1/2 inch; arkosic; moderately cemented.		
			28.4' - 41.0' Fine to medium-grained Sandstone with Silt; Red Brown; cross-bedded with isolated clasts up to 1/2 inch; some low angle fractures; moderately cemented.		
		28.5'			
	Silt filled fracture				
		29.5'			
		30.5'			
		31.5'	(Brunswick Formation)		

Earth Tech, Inc.
12 Metro Park Road
Albany, New York 12205

CORE LOG

Hole No.: MW-7
Sheet 4 of 5

Job No.: 43015.01

Project: Former Wilsonart Warehouse

Client: Wilsonart International, Inc.

FORMATION / MEMBER / Zone/Unit	Graphic Log	Depth Scale	Lithologic Description (include in order: ROCK TYPE, color, grain size, texture, bedding, fracture & minerals,	Bedding Angle	Percent Recovery
Brunswick / Trba	Silt filled fracture	31.5'	Run No. 6: 31.0' - 36.0' BGS; Rec = 4.8'; HX Core @ 4-5 minutes per foot; Bkgd = 1.5 ppm; H.S. = 2.4 ppm.	0 - 5°	95
		32.5'			
		33.5'			
		34.5'			
		35.5'			
		36.5'			
		37.5'	(Brunswick Formation)		

Earth Tech, Inc.
12 Metro Park Road
Albany, New York 12205

CORE LOG

Hole No.: MW-7
Sheet 5 of 5

Job No.: 43015.01

Project: Former Wilsonart Warehouse

Client: Wilsonart International, Inc.

FORMATION	MEMBER	Zone/Unit	Graphic Log	Depth Scale	Lithologic Description (include in order: ROCK TYPE, color, grain size, texture, bedding, fracture & minerals,	Bedding Angle	Percent Recovery
Brunswick	Trba			37.5'	Run No. 7: 36.0' - 41.0' BGS; Rec = 5.1'; HX Core @ 4-5 minutes per foot; Bkgd = 1.5 ppm; H.S. = 2.2 ppm; regained circulation @ 36.0' - 37.0' BGS.	0 - 5°	95
				38.5'			
				39.5'			
				40.5'			
					(Brunswick Formation) 41.0'		
					End of Core @ 41.0' BGS [151.70']		
				41.5'			
				42.5'			

Earth Tech, Inc. 12 Metro Park Road Albany, New York 12205	**CORE LOG**	Hole No.: MW-8 Sheet 1 of 5	Job No.: 43015.01 Date Started: 10/10/00
Project: Former Wilsonart Warehouse	Drilling Contractor: Parratt-Wolff, Inc.		Date Finished: 10/11/00
Client: Wilsonart International, Inc.	Driller: Glenn Lansing		Total Depth: 45.0'
Purpose: Environmental Monitoring	Geologist: Skip Delclos		PVC Elev.: 197.58'
Location: Congers, NY	Length of Casing:		S.W.L.: 26.86' (PVC)
Hole Location:	Casing Size: / Core Size: 4" / Inclination/Bearing:		on 10/16/00

FORMATION / MEMBER / Zone/Unit	Graphic Log	Depth Scale	Lithologic Description (include in order: ROCK TYPE, color, grain size, texture, bedding, fracture & minerals,	Bedding Angle	Percent Recovery
Brunswick / Trba			20.0' - 21.75' Medium to coarse-grained Sandstone, Red Brown, cross-bedded with clasts up to 1/2 inch, clasts are quartz, mica, feldspar; arkosic, no fractures, moderaley cemented.	0 - 5°	95
		21.0'			
		22.0'	21.75' - 45.0' Very fine to fine-grained Sandstone with Silt, Red Brown, cross-bedded with siltier zones at 22.0' - 26.0' and 27.5' - 28.5', some Gray to Greenish Gray "chips" of Sand/Siltstone, some fracturing present (mostly low angle), moderately cemented.	0 - 5°	95
	45° fracture				
		23.0'			
			Run No. 1: 20.0' - 25.0' BGS; Rec = 5.0'; HX Cored @ 5-7 minutes per foot; Bkgd = 1.5 ppm; H.S. 1.7 ppm.		
	Fracture filled with silt	24.0'			
	Fracture filled with silt				
	45° fracture	25.0'	Water Level = 24.96' BGS (10/16/00). (Brunswick Formation)		

SILTIER

Earth Tech, Inc. 12 Metro Park Road Albany, New York 12205	**CORE LOG**	Hole No.: MW-8 Sheet 2 of 5	Job No.: 43015.01
Project: Former Wilsonart Warehouse	Client: Wilsonart International, Inc.		

FORMATION MEMBER Zone/Unit	Graphic Log	Depth Scale	Lithologic Description (include in order: ROCK TYPE, color, grain size, texture, bedding, fracture & minerals,	Bedding Angle	Percent Recovery
Brunswick Trba	Vertical fracture	26.0'	SILTIER Run No. 2: 25.0' - 30.0' BGS; Rec = 5.0'; HX Cored @ 5-6 minutes per foot; Bkgd = 1.3 ppm; H.S. 1.6 ppm.	0 - 5°	95
		27.0'			
		28.0'	SILTIER		
		29.0'			
		30.0'	30.0' - 31.5' Higher percentage of silt.		
		31.0'	(Brunswick Formation)		

Earth Tech, Inc.
12 Metro Park Road
Albany, New York 12205

CORE LOG

Hole No.: MW-8
Sheet 3 of 5

Job No.: 43015.01

Project: Former Wilsonart Warehouse

Client: Wilsonart International, Inc.

FORMATION / MEMBER / Zone/Unit	Graphic Log	Depth Scale	Lithologic Description (include in order: ROCK TYPE, color, grain size, texture, bedding, fracture & minerals,	Bedding Angle	Percent Recovery
Brunswick / Trba	70° - 45° fracture	31.0'	Run No. 3: 30.0' - 35.0' BGS; Rec = 5.0'; HX Cored @ 5-7 minutes per foot; Bkgd = 1.3 ppm; H.S. 1.6 ppm (30' BGS); 1.7 ppm (33' BGS).	0 - 5°	95
		32.0'			
		33.0'			
		34.0'			
	45° fracture	35.0'			
		36.0'			

(Brunswick Formation)

Earth Tech, Inc. 12 Metro Park Road Albany, New York 12205	**CORE LOG**	Hole No.: MW-8 Sheet 4 of 5	Job No.: 43015.01
Project: Former Wilsonart Warehouse	Client: Wilsonart International, Inc.		

FORMATION MEMBER Zone/Unit	Graphic Log	Depth Scale	Lithologic Description (include in order: ROCK TYPE, color, grain size, texture, bedding, fracture & minerals,	Bedding Angle	Percent Recovery
Brunswick / Trba		37.0'	Run No. 4: 35.0' - 40.0' BGS; Rec = 5.0'; HX Cored @ 5-6 minutes per foot; Bkgd = 1.3 ppm; H.S. 1.6 ppm (35' BGS), 1.7 ppm (40' BGS).	0 - 5°	95
		38.0'			
		39.0'			
		40.0'	Run No. 5: 40.0' - 45.0' BGS; Rec = 5.0'; HX Cored @ 6-7 minutes per foot; Bkgd = 1.4 ppm; H.S. 1.7 ppm.		
		41.0'	41.0' - 42.8' Fine to medium-grained Sandstone with Silt, Red Brown cross-bedded, chip conglomerate first 2 inches, moderately cemented.		
		42.0'			
			(Brunswick Formation)		

Earth Tech, Inc.
12 Metro Park Road
Albany, New York 12205

CORE LOG

Hole No.: MW-8
Sheet 5 of 5

Job No.: 43015.01

Project: Former Wilsonart Warehouse

Client: Wilsonart International, Inc.

FORMATION / MEMBER / Zone/Unit	Graphic Log	Depth Scale	Lithologic Description (include in order: ROCK TYPE, color, grain size, texture, bedding, fracture & minerals,	Bedding Angle	Percent Recovery
Brunswick / Trba		43.0'	42.8' - 45.0' Very fine to fine-grained Sandstone with Silt, Red Brown, cross-bedded; low angle fractures present, moderately cemented.	0 - 5°	95
		44.0'	Chip conglomerate		
			Chip conglomerate		
			(Brunswick Formation) 45.0'		
		45.0'	End of Core @ 45.0' BGS [150.68']		
		46.0'			
		47.0'			
		48.0			

Earth Tech, Inc. 12 Metro Park Road Albany, New York 12205	**CORE LOG**	Hole No.: MW-9	Job No.: 43015.01
		Sheet 1 of 3	Date Started: 10/12/00
Project: Former Wilsonart Warehouse	Drilling Contractor: Parratt-Wolff, Inc.		Date Finished: 10/13/00
Client: Wilsonart International, Inc.	Driller: Glenn Lansing		Total Depth: 31.0'
Purpose: Environmental Monitoring	Geologist: Skip Delclos		PVC Elev.: 170.30'
Location: Congers, NY	Length of Casing:		S.W.L.: 8.60' (PVC)
Hole Location:	Casing Size: / Core Size: 4.0" / Inclination/Bearing:		on 10/16/00

FORMATION / MEMBER / Zone/Unit	Graphic Log	Depth Scale	Lithologic Description (include in order: ROCK TYPE, color, grain size, texture, bedding, fracture & minerals,	Bedding Angle	Percent Recovery
Brunswick / Trba			18.5' - 21.0' Medium to coarse-grained Sandstone, Red Brown, isolated clasts up to 1/4 inch, clasts are quartz, feldspar and mica, arkosic, moderately to weakly cemented.	0 - 5°	64
		19.5'	Run No. 1: 18.5' - 21.0' BGS; Rec = 1.6'; HX Cored @ 2-3 minutes per foot; Background = 1.4 ppm; H.S. = 3.3 ppm.		
		20.5'	Run No. 2: 21.0' - 26.0' BGS; Rec = 5.0'; HX Cored @ 3-4 minutes per foot; Background = 1.4 ppm; H.S. = 3.1 ppm.		100
		21.5'	21.0' - 23.4' Medium to coarse-grained Sandstone with Silt seams, Red Brown isolated clasts up to 1/2 inch, arkosic, fractures and seams filled with Silt, moderately to weakly cemented.		
	Vertical to sub-vertical fracture	22.5'	Water Loss @ 22.0' BGS		
		23.5'	(Brunswick Formation)		

Earth Tech, Inc. 12 Metro Park Road Albany, New York 12205	CORE LOG	Hole No.: MW-9 Sheet 2 of 3	Job No.: 43015.01
Project: Former Wilsonart Warehouse	Client: Wilsonart International, Inc.		

FORMATION / MEMBER / Zone/Unit	Graphic Log	Depth Scale	Lithologic Description (include in order: ROCK TYPE, color, grain size, texture, bedding, fracture & minerals,	Bedding Angle	Percent Recovery
Brunswick / Trba	Silt filled fractures		23.4' - 30.8' Fine to medium-grained Sandstone, Red Brown, cross-bedded with isolated clasts up to 1/4 inch, some isolated low angle fractures, moderately cemented.	0 - 5°	95
		24.5'			
		25.5'			
		26.5'	Run No. 3: 26.0' - 31.0' BGS; Rec = 4.9'; HX Cored @ 3-4 minutes per foot; Background = 1.3 ppm; H.S. = 2.9 ppm.		
		27.5'			
		28.5'			
			(Brunswick Formation)		

Earth Tech, Inc.
12 Metro Park Road
Albany, New York 12205

CORE LOG

Hole No.: MW-9
Sheet 3 of 3

Job No.: 43015.01

Project: Former Wilsonart Warehouse

Client: Wilsonart International, Inc.

FORMATION / MEMBER / Zone/Unit	Graphic Log	Depth Scale	Lithologic Description (include in order: ROCK TYPE, color, grain size, texture, bedding, fracture & minerals,	Bedding Angle	Percent Recovery
Brunswick / Trba		29.5'		0 - 5°	95
		30.5'			
			30.8' - 31.0' Fine grained Sandstone with Silt, Red Brown, cross-bedded, moderately cemented. (Brunswick Formation) 31.0'		
			End of Core @ 31.0' BGS [137.68']		

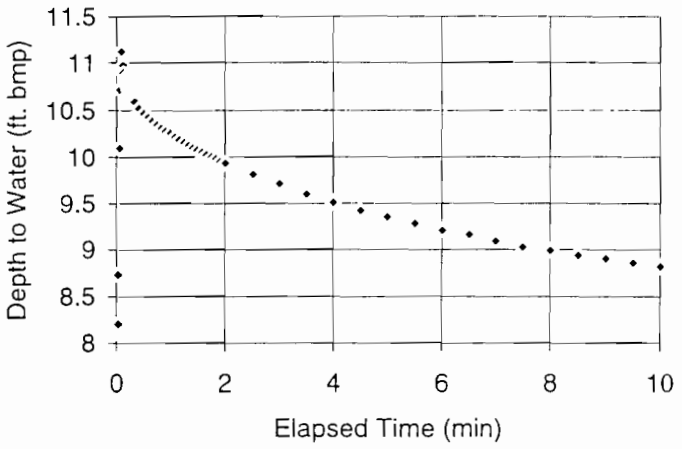
APPENDIX E

HYDRAULIC CONDUCTIVITY TEST REPORTS

SLUG TEST DATA ENTRY FORM

Client Name: Wilsonart - Congers, NY Well Number: MW-4 Test Type: Bail
Project No.: 43015.01 Gnd. Elev.: 177.6 Weather:
Project Name: Subsurface Investigation Tested By: MAW Run Date: 1.25.2001

BASIC TEST DATA	
Measurement Units (1-6):	2
Unconfined(1)/Confined(2):	1
Well Depth - TOC (feet):	19.87
Static W/L-Depth (ft.):	8.11
Riser Pipe Diameter (feet):	0.17
Initial Test Depth Value (ft.):	
TOC Elevation (feet):	179.35
Intake/Soil Col. Diam. (feet):	0.33
Depth to Top of Pack (feet):	6
Pack/Soil Col. Length (ft.):	13
Saturat. Col. Thickness (ft.):	11.76
Casing Soil Length (if appl.):	
Casing Stickup (feet):	1.75
Slug Volume (ft3):	0.13
Thickness of Aquifer (feet):	50



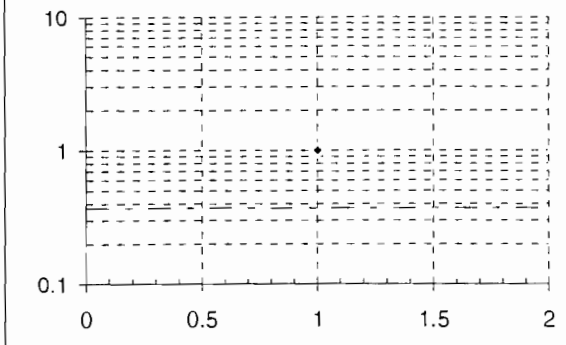
AQUIFER RECOVERY DATA

Time (min)	Depth (ft.)	Time (min)	Depth (ft.)	Time (min)	Depth (ft.)	Time (min)	Depth (ft.)
0	8.11	0.33	10.59	4.5	9.42		
0.01	8.11	0.41	10.52	5	9.35		
0.01	8.11	0.5	10.46	5.5	9.28		
0.02	8.12	0.58	10.42	6	9.21		
0.02	8.15	0.66	10.38	6.5	9.16		
0.02	8.17	0.75	10.34	7	9.09		
0.03	8.2	0.83	10.3	7.5	9.03		
0.03	8.73	0.91	10.27	8	8.99		
0.05	10.09	1	10.25	8.5	8.94		
0.06	10.72	1.08	10.21	9	8.9		
0.08	11.12	1.16	10.18	9.5	8.86		
0.1	10.95	1.25	10.15	10	8.82		
0.11	10.97	1.33	10.12				
0.13	10.89	1.41	10.09				
0.15	10.84	1.5	10.07				
0.16	10.8	1.58	10.05				
0.18	10.78	1.66	10.02				
0.2	10.75	1.75	10				
0.21	10.72	1.83	9.98				
0.23	10.69	1.91	9.95				
0.25	10.67	2	9.93				
0.26	10.65	2.5	9.81				
0.28	10.63	3	9.71				
0.3	10.61	3.5	9.6				
0.31	10.6	4	9.51				

Hvorslev's Method for Calculating Hydraulic Conductivity

Project Name: Subsurface Investigation
Project No.: 43015.01
Client Name: Wilsonart - Congers, NY
Run Date: 1.25.01
User Name: MAW
Identification: MW-4

Test Type:	7	1 to 7
Riser Pipe Diameter:	0.17	feet
Intake Diam.:	0.33	feet
Pack Length:	13	feet
Water Table Depth:	8.11	feet
Line Fit Starting No.:	19	Min 1 to
Line Fit Ending No.:	55	Max 62
Entrapped Air Correct.:	N	Y or N
Specify Output Units:	7	1 to 9
K(h):	9.51E-05	cm./sec.
Basic Time Lag (min.):	6.49	
Correlation Coefficient:	0.9911	



Meas. No.	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Hi/H-HO)	Regression To LN(Hi/H-HO)
1)	0.00	8.11	0.00	#NUM!	-0.0383
2)	0.01	8.11	0.00	#NUM!	-0.0397
3)	0.01	8.11	0.00	#NUM!	-0.0397
4)	0.02	8.12	0.01	-5.5645	-0.0412
5)	0.02	8.15	0.04	-4.1782	-0.0412
6)	0.02	8.17	0.06	-3.7728	-0.0412
7)	0.03	8.20	0.09	-3.3673	-0.0426
8)	0.03	8.73	0.62	-1.4374	-0.0426
9)	0.05	10.09	1.98	-0.2763	-0.0455
10)	0.06	10.72	2.61	0.0000	-0.0469
11)	0.08	11.12	3.01	0.1426	-0.0498
12)	0.10	10.95	2.84	0.0845	-0.0527
13)	0.11	10.97	2.86	0.0915	-0.0541
14)	0.13	10.89	2.78	0.0631	-0.0570
15)	0.15	10.84	2.73	0.0450	-0.0598
16)	0.16	10.80	2.69	0.0302	-0.0613
17)	0.18	10.78	2.67	0.0227	-0.0641
18)	0.20	10.75	2.64	0.0114	-0.0670
19)	0.21	10.72	2.61	0.0000	-0.0685
20)	0.23	10.69	2.58	-0.0116	-0.0713
21)	0.25	10.67	2.56	-0.0193	-0.0742
22)	0.26	10.65	2.54	-0.0272	-0.0756
23)	0.28	10.63	2.52	-0.0351	-0.0785
24)	0.30	10.61	2.50	-0.0431	-0.0814
25)	0.31	10.60	2.49	-0.0471	-0.0828
26)	0.33	10.59	2.48	-0.0511	-0.0857
27)	0.41	10.52	2.41	-0.0797	-0.0972
28)	0.50	10.46	2.35	-0.1049	-0.1101
29)	0.58	10.42	2.31	-0.1221	-0.1216
30)	0.66	10.38	2.27	-0.1396	-0.1331
31)	0.75	10.34	2.23	-0.1573	-0.1460
32)	0.83	10.30	2.19	-0.1754	-0.1575
33)	0.91	10.27	2.16	-0.1892	-0.1690
34)	1.00	10.25	2.14	-0.1985	-0.1819
35)	1.08	10.21	2.10	-0.2174	-0.1934
36)	1.16	10.18	2.07	-0.2318	-0.2049

Hvorslev's Method for Calculating Hydraulic Conductivity

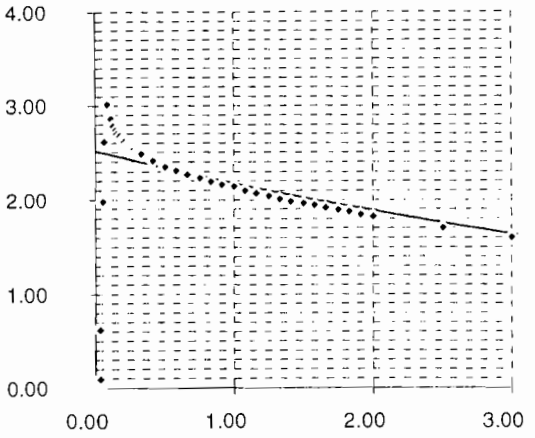
Project Name: Subsurface Investigation
Project No.: 43015.01
Client Name: Wilsonart - Congers, NY
Run Date: 1.25.01
User Name: MAW
Identification: MW-4

37)	1.25	10.15	2.04	-0.2464	-0.2178
38)	1.33	10.12	2.01	-0.2612	-0.2293
39)	1.41	10.09	1.98	-0.2763	-0.2408
40)	1.50	10.07	1.96	-0.2864	-0.2538
41)	1.58	10.05	1.94	-0.2967	-0.2653
42)	1.66	10.02	1.91	-0.3122	-0.2767
43)	1.75	10.00	1.89	-0.3228	-0.2897
44)	1.83	9.98	1.87	-0.3334	-0.3012
45)	1.91	9.95	1.84	-0.3496	-0.3127
46)	2.00	9.93	1.82	-0.3605	-0.3256
47)	2.50	9.81	1.70	-0.4287	-0.3974
48)	3.00	9.71	1.60	-0.4893	-0.4692
49)	3.50	9.60	1.49	-0.5606	-0.5411
50)	4.00	9.51	1.40	-0.6229	-0.6129
51)	4.50	9.42	1.31	-0.6893	-0.6847
52)	5.00	9.35	1.24	-0.7442	-0.7565
53)	5.50	9.28	1.17	-0.8023	-0.8283
54)	6.00	9.21	1.10	-0.8640	-0.9002
55)	6.50	9.16	1.05	-0.9106	-0.9720
56)	7.00	9.09	0.98	-0.9796	-1.0438
57)	7.50	9.03	0.92	-1.0427	-1.1156
58)	8.00	8.99	0.88	-1.0872	-1.1875
59)	8.50	8.94	0.83	-1.1457	-1.2593
60)	9.00	8.90	0.79	-1.1951	-1.3311
61)	9.50	8.86	0.75	-1.2470	-1.4029
62)	10.00	8.82	0.71	-1.3018	-1.4747

Bouwer & Rice Method for Calculating Hydraulic Conductivity

Project: Subsurface Investigation
Project No.: 43015.01
Client Name: Wilsonart - Congers, NY
Identification: MW-4
User Name: MAW
Run Date: 1.25.01

Riser Pipe Diameter:	0.17	feet
Intake Diameter:	0.33	feet
Screen Length:	13	feet
Saturated Column Length:	11.76	feet
Water Table Depth:	8.11	feet
Aquifer Thickness:	50	feet
Line Fit Starting No.:	19	Min 1 to
Line Fit Ending No.:	55	Max 62
Specify Output Units:	7	1 to 9
K(h):	5.83E-05	cm./sec.
Correlation Coefficient:	0.9911	



Meas. #	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Yt)	Regression On LN(Yt)
1)	0.00	8.11	0.00	#NUM!	0.921
2)	0.01	8.11	0.00	#NUM!	0.920
3)	0.01	8.11	0.00	#NUM!	0.920
4)	0.02	8.12	0.01	-4.605	0.918
5)	0.02	8.15	0.04	-3.219	0.918
6)	0.02	8.17	0.06	-2.813	0.918
7)	0.03	8.20	0.09	-2.408	0.917
8)	0.03	8.73	0.62	-0.478	0.917
9)	0.05	10.09	1.98	0.683	0.914
10)	0.06	10.72	2.61	0.959	0.912
11)	0.08	11.12	3.01	1.102	0.910
12)	0.10	10.95	2.84	1.044	0.907
13)	0.11	10.97	2.86	1.051	0.905
14)	0.13	10.89	2.78	1.022	0.902
15)	0.15	10.84	2.73	1.004	0.900
16)	0.16	10.80	2.69	0.990	0.898
17)	0.18	10.78	2.67	0.982	0.895
18)	0.20	10.75	2.64	0.971	0.892
19)	0.21	10.72	2.61	0.959	0.891
20)	0.23	10.69	2.58	0.948	0.888
21)	0.25	10.67	2.56	0.940	0.885
22)	0.26	10.65	2.54	0.932	0.884
23)	0.28	10.63	2.52	0.924	0.881
24)	0.30	10.61	2.50	0.916	0.878
25)	0.31	10.60	2.49	0.912	0.877
26)	0.33	10.59	2.48	0.908	0.874
27)	0.41	10.52	2.41	0.880	0.862
28)	0.50	10.46	2.35	0.854	0.849
29)	0.58	10.42	2.31	0.837	0.838
30)	0.66	10.38	2.27	0.820	0.826
31)	0.75	10.34	2.23	0.802	0.813
32)	0.83	10.30	2.19	0.784	0.802
33)	0.91	10.27	2.16	0.770	0.790
34)	1.00	10.25	2.14	0.761	0.777
35)	1.08	10.21	2.10	0.742	0.766

Bouwer & Rice Method for Calculating Hydraulic Conductivity

Project: Subsurface Investigation Project No.: 43015.01

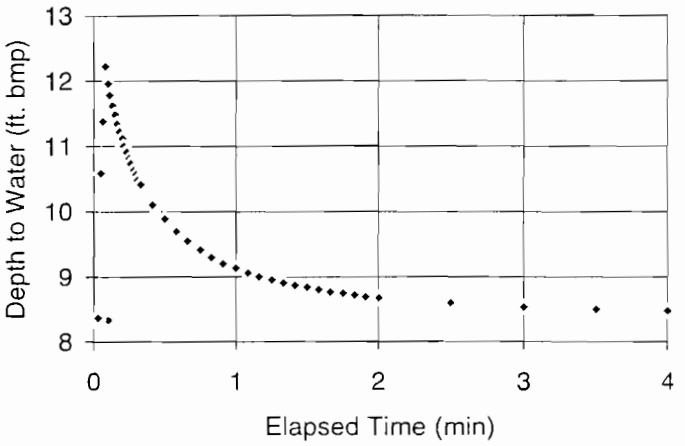
Client Name: Wilsonart - Congers, NY Identification: MW-4

36)	1.16	10.18	2.07	0.728	0.754
37)	1.25	10.15	2.04	0.713	0.742
38)	1.33	10.12	2.01	0.698	0.730
39)	1.41	10.09	1.98	0.683	0.719
40)	1.50	10.07	1.96	0.673	0.706
41)	1.58	10.05	1.94	0.663	0.694
42)	1.66	10.02	1.91	0.647	0.683
43)	1.75	10.00	1.89	0.637	0.670
44)	1.83	9.98	1.87	0.626	0.658
45)	1.91	9.95	1.84	0.610	0.647
46)	2.00	9.93	1.82	0.599	0.634
47)	2.50	9.81	1.70	0.531	0.562
48)	3.00	9.71	1.60	0.470	0.490
49)	3.50	9.60	1.49	0.399	0.418
50)	4.00	9.51	1.40	0.336	0.346
51)	4.50	9.42	1.31	0.270	0.275
52)	5.00	9.35	1.24	0.215	0.203
53)	5.50	9.28	1.17	0.157	0.131
54)	6.00	9.21	1.10	0.095	0.059
55)	6.50	9.16	1.05	0.049	-0.013
56)	7.00	9.09	0.98	-0.020	-0.084
57)	7.50	9.03	0.92	-0.083	-0.156
58)	8.00	8.99	0.88	-0.128	-0.228
59)	8.50	8.94	0.83	-0.186	-0.300
60)	9.00	8.90	0.79	-0.236	-0.372
61)	9.50	8.86	0.75	-0.288	-0.444
62)	10.00	8.82	0.71	-0.342	-0.515

SLUG TEST DATA ENTRY FORM

Client Name: Wilsonart - Congers, NY Well Number: MW-6 Test Type: Bail
Project No.: 43015.01 Gnd. Elev.: 177.3 Weather:
Project Name: Subsurface Investigation Tested By: MAW Run Date: 1.25.2001

BASIC TEST DATA	
Measurement Units (1-6):	2
Unconfined(1)/Confined(2):	1
Well Depth - TOC (feet):	32.1
Static W/L-Depth (ft.):	8.33
Riser Pipe Diameter (feet):	0.17
Initial Test Depth Value (ft.):	
TOC Elevation (feet):	179.45
Intake/Soil Col. Diam. (feet):	0.33
Depth to Top of Pack (feet):	17.8
Pack/Soil Col. Length (ft.):	12.7
Saturat. Col. Thickness (ft.):	23.77
Casing Soil Length (if appl.):	
Casing Stickup (feet):	2.15
Slug Volume (ft3):	0.13
Thickness of Aquifer (feet):	50



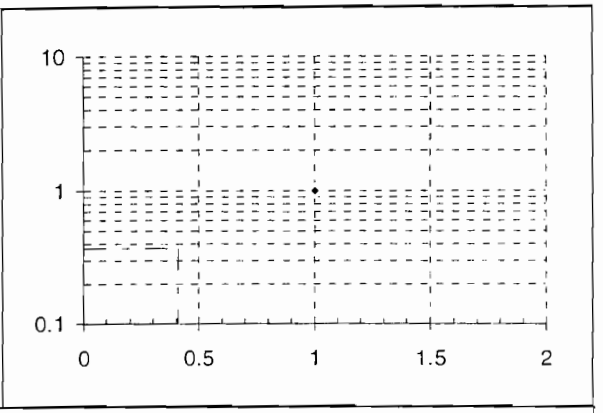
AQUIFER RECOVERY DATA

Time (min)	Depth (ft.)	Time (min)	Depth (ft.)	Time (min)	Depth (ft.)	Time (min)	Depth (ft.)
0	8.33	0.33	10.41	4.5	8.45		
0.1	8.33	0.41	10.1	5	8.43		
0.01	8.33	0.5	9.88	5.5	8.41		
0.02	8.33	0.58	9.69	6	8.41		
0.02	8.34	0.66	9.54	6.5	8.4		
0.02	8.35	0.75	9.4	7	8.4		
0.03	8.34	0.83	9.3	7.5	8.39		
0.03	8.36	0.91	9.2	8	8.39		
0.05	10.58	1	9.13	8.5	8.39		
0.06	11.37	1.08	9.05	9	8.38		
0.08	12.22	1.16	9	9.5	8.38		
0.1	11.95	1.25	8.95	10	8.37		
0.11	11.78	1.33	8.9				
0.13	11.62	1.41	8.86				
0.15	11.49	1.5	8.83				
0.16	11.34	1.58	8.8				
0.18	11.22	1.66	8.76				
0.2	11.12	1.75	8.74				
0.21	11	1.83	8.71				
0.23	10.91	1.91	8.69				
0.25	10.81	2	8.67				
0.26	10.73	2.5	8.59				
0.28	10.63	3	8.53				
0.3	10.56	3.5	8.49				
0.31	10.48	4	8.47				

Hvorslev's Method for Calculating Hydraulic Conductivity

Project Name: Subsurface Investigation
Project No.: 43015.01
Client Name: Wilsonart - Congers, NY
Run Date: 1.25.01
User Name: MAW
Identification: MW-6

Test Type:	7	1 to 7
Riser Pipe Diameter:	0.17	feet
Intake Diam.:	0.33	feet
Pack Length:	12.7	feet
Water Table Depth:	8.33	feet
Line Fit Starting No.:	12	Min 1 to
Line Fit Ending No.:	25	Max 62
Entrapped Air Correct.:	N	Y or N
Specify Output Units:	7	1 to 9
K(h):	1.54E-03	cm./sec.
Basic Time Lag (min.):	0.41	
Correlation Coefficient:	0.9976	

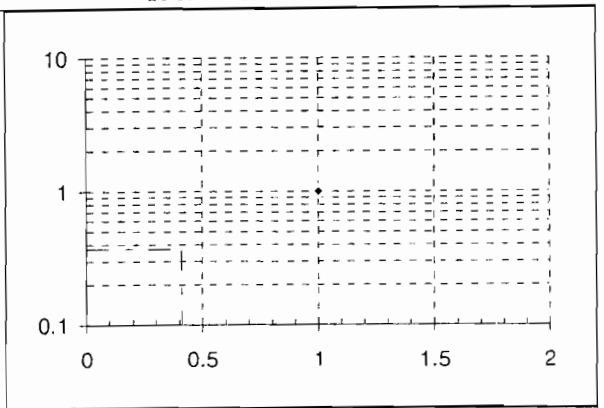


Meas. No.	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Hi/H-HO)	Regression To LN(Hi/H-HO)
1)	0.00	8.33	0.00	#NUM!	0.2154
2)	0.10	8.33	0.00	#NUM!	-0.0235
3)	0.01	8.33	0.00	#NUM!	0.1915
4)	0.02	8.33	0.00	#NUM!	0.1676
5)	0.02	8.34	0.01	-5.8916	0.1676
6)	0.02	8.35	0.02	-5.1985	0.1676
7)	0.03	8.34	0.01	-5.8916	0.1437
8)	0.03	8.36	0.03	-4.7930	0.1437
9)	0.05	10.58	2.25	-0.4755	0.0959
10)	0.06	11.37	3.04	-0.1746	0.0720
11)	0.08	12.22	3.89	0.0719	0.0243
12)	0.10	11.95	3.62	0.0000	-0.0235
13)	0.11	11.78	3.45	-0.0481	-0.0474
14)	0.13	11.62	3.29	-0.0956	-0.0952
15)	0.15	11.49	3.16	-0.1359	-0.1430
16)	0.16	11.34	3.01	-0.1845	-0.1669
17)	0.18	11.22	2.89	-0.2252	-0.2146
18)	0.20	11.12	2.79	-0.2604	-0.2624
19)	0.21	11.00	2.67	-0.3044	-0.2863
20)	0.23	10.91	2.58	-0.3387	-0.3341
21)	0.25	10.81	2.48	-0.3782	-0.3819
22)	0.26	10.73	2.40	-0.4110	-0.4058
23)	0.28	10.63	2.30	-0.4536	-0.4535
24)	0.30	10.56	2.23	-0.4845	-0.5013
25)	0.31	10.48	2.15	-0.5210	-0.5252
26)	0.33	10.41	2.08	-0.5541	-0.5730
27)	0.41	10.10	1.77	-0.7155	-0.7641
28)	0.50	9.88	1.55	-0.8482	-0.9791
29)	0.58	9.69	1.36	-0.9790	-1.1703
30)	0.66	9.54	1.21	-1.0959	-1.3614
31)	0.75	9.40	1.07	-1.2188	-1.5764
32)	0.83	9.30	0.97	-1.3169	-1.7675
33)	0.91	9.20	0.87	-1.4257	-1.9586
34)	1.00	9.13	0.80	-1.5096	-2.1737
35)	1.08	9.05	0.72	-1.6150	-2.3648
36)	1.16	9.00	0.67	-1.6870	-2.5559

Hvorslev's Method for Calculating Hydraulic Conductivity

Project Name: Subsurface Investigation
Project No.: 43015.01
Client Name: Wilsonart - Congers, NY
Run Date: 1.25.01
User Name: MAW
Identification: MW-6

Test Type:	7	1 to 7
Riser Pipe Diameter:	0.17	feet
Intake Diam.:	0.33	feet
Pack Length:	12.7	feet
Water Table Depth:	8.33	feet
Line Fit Starting No.:	12	Min 1 to
Line Fit Ending No.:	25	Max 62
Entrapped Air Correct.:	N	Y or N
Specify Output Units:	7	1 to 9
K(h):	1.54E-03	cm./sec.
Basic Time Lag (min.):	0.41	
Correlation Coefficient:	0.9976	



Meas. No.	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Hi/H-HO)	Regression To LN(Hi/H-HO)
1)	0.00	8.33	0.00	#NUM!	0.2154
2)	0.10	8.33	0.00	#NUM!	-0.0235
3)	0.01	8.33	0.00	#NUM!	0.1915
4)	0.02	8.33	0.00	#NUM!	0.1676
5)	0.02	8.34	0.01	-5.8916	0.1676
6)	0.02	8.35	0.02	-5.1985	0.1676
7)	0.03	8.34	0.01	-5.8916	0.1437
8)	0.03	8.36	0.03	-4.7930	0.1437
9)	0.05	10.58	2.25	-0.4755	0.0959
10)	0.06	11.37	3.04	-0.1746	0.0720
11)	0.08	12.22	3.89	0.0719	0.0243
12)	0.10	11.95	3.62	0.0000	-0.0235
13)	0.11	11.78	3.45	-0.0481	-0.0474
14)	0.13	11.62	3.29	-0.0956	-0.0952
15)	0.15	11.49	3.16	-0.1359	-0.1430
16)	0.16	11.34	3.01	-0.1845	-0.1669
17)	0.18	11.22	2.89	-0.2252	-0.2146
18)	0.20	11.12	2.79	-0.2604	-0.2624
19)	0.21	11.00	2.67	-0.3044	-0.2863
20)	0.23	10.91	2.58	-0.3387	-0.3341
21)	0.25	10.81	2.48	-0.3782	-0.3819
22)	0.26	10.73	2.40	-0.4110	-0.4058
23)	0.28	10.63	2.30	-0.4536	-0.4535
24)	0.30	10.56	2.23	-0.4845	-0.5013
25)	0.31	10.48	2.15	-0.5210	-0.5252
26)	0.33	10.41	2.08	-0.5541	-0.5730
27)	0.41	10.10	1.77	-0.7155	-0.7641
28)	0.50	9.88	1.55	-0.8482	-0.9791
29)	0.58	9.69	1.36	-0.9790	-1.1703
30)	0.66	9.54	1.21	-1.0959	-1.3614
31)	0.75	9.40	1.07	-1.2188	-1.5764
32)	0.83	9.30	0.97	-1.3169	-1.7675
33)	0.91	9.20	0.87	-1.4257	-1.9586
34)	1.00	9.13	0.80	-1.5096	-2.1737
35)	1.08	9.05	0.72	-1.6150	-2.3648
36)	1.16	9.00	0.67	-1.6870	-2.5559

Hvorslev's Method for Calculating Hydraulic Conductivity

Project Name: Subsurface Investigation | Project No.: 43015.01

Client Name: Wilsonart - Congers, NY | Run Date: 1.25.01

User Name: MAW | Identification: MW-6

37)	1.25	8.95	0.62	-1.7645	-2.7709
38)	1.33	8.90	0.57	-1.8486	-2.9620
39)	1.41	8.86	0.53	-1.9214	-3.1532
40)	1.50	8.83	0.50	-1.9796	-3.3682
41)	1.58	8.80	0.47	-2.0415	-3.5593
42)	1.66	8.76	0.43	-2.1304	-3.7504
43)	1.75	8.74	0.41	-2.1781	-3.9654
44)	1.83	8.71	0.38	-2.2541	-4.1566
45)	1.91	8.69	0.36	-2.3081	-4.3477
46)	2.00	8.67	0.34	-2.3653	-4.5627
47)	2.50	8.59	0.26	-2.6335	-5.7572
48)	3.00	8.53	0.20	-2.8959	-6.9517
49)	3.50	8.49	0.16	-3.1191	-8.1463
50)	4.00	8.47	0.14	-3.2526	-9.3408
51)	4.50	8.45	0.12	-3.4067	-10.5353
52)	5.00	8.43	0.10	-3.5891	-11.7298
53)	5.50	8.41	0.08	-3.8122	-12.9243
54)	6.00	8.41	0.08	-3.8122	-14.1189
55)	6.50	8.40	0.07	-3.9457	-15.3134
56)	7.00	8.40	0.07	-3.9457	-16.5079
57)	7.50	8.39	0.06	-4.0999	-17.7024
58)	8.00	8.39	0.06	-4.0999	-18.8969
59)	8.50	8.39	0.06	-4.0999	-20.0915
60)	9.00	8.38	0.05	-4.2822	-21.2860
61)	9.50	8.38	0.05	-4.2822	-22.4805
62)	10.00	8.37	0.04	-4.5053	-23.6750

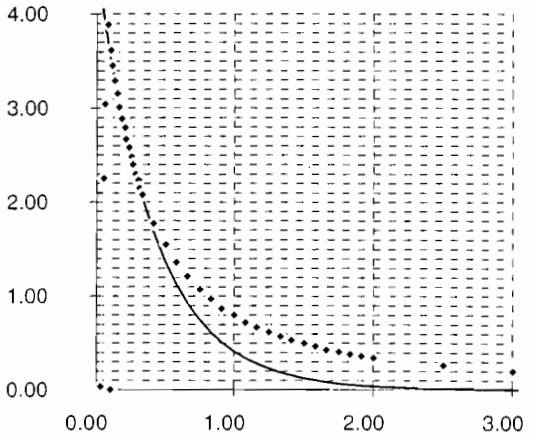
Hvorslev's Method for Calculating Hydraulic Conductivity

	Project Name:	Subsurface Investigation		Project No.:	43015.01
	Client Name:	Wilsonart - Congers, NY		Run Date:	1.25.01
	User Name:	MAW		Identification:	MW-6
37)	1.25	8.95	0.62	-1.7645	-2.7709
38)	1.33	8.90	0.57	-1.8486	-2.9620
39)	1.41	8.86	0.53	-1.9214	-3.1532
40)	1.50	8.83	0.50	-1.9796	-3.3682
41)	1.58	8.80	0.47	-2.0415	-3.5593
42)	1.66	8.76	0.43	-2.1304	-3.7504
43)	1.75	8.74	0.41	-2.1781	-3.9654
44)	1.83	8.71	0.38	-2.2541	-4.1566
45)	1.91	8.69	0.36	-2.3081	-4.3477
46)	2.00	8.67	0.34	-2.3653	-4.5627
47)	2.50	8.59	0.26	-2.6335	-5.7572
48)	3.00	8.53	0.20	-2.8959	-6.9517
49)	3.50	8.49	0.16	-3.1191	-8.1463
50)	4.00	8.47	0.14	-3.2526	-9.3408
51)	4.50	8.45	0.12	-3.4067	-10.5353
52)	5.00	8.43	0.10	-3.5891	-11.7298
53)	5.50	8.41	0.08	-3.8122	-12.9243
54)	6.00	8.41	0.08	-3.8122	-14.1189
55)	6.50	8.40	0.07	-3.9457	-15.3134
56)	7.00	8.40	0.07	-3.9457	-16.5079
57)	7.50	8.39	0.06	-4.0999	-17.7024
58)	8.00	8.39	0.06	-4.0999	-18.8969
59)	8.50	8.39	0.06	-4.0999	-20.0915
60)	9.00	8.38	0.05	-4.2822	-21.2860
61)	9.50	8.38	0.05	-4.2822	-22.4805
62)	10.00	8.37	0.04	-4.5053	-23.6750

Bouwer & Rice Method for Calculating Hydraulic Conductivity

Project: Subsurface Investigation
Project No.: 43015.01
Client Name: Wilsonart - Congers, NY
Identification: MW-6
User Name: MAW
Run Date: 1.25.01

Riser Pipe Diameter:	0.17	feet
Intake Diameter:	0.33	feet
Screen Length:	12.7	feet
Saturated Column Length:	23.77	feet
Water Table Depth:	8.33	feet
Aquifer Thickness:	50	feet
Line Fit Starting No.:	12	Min 1 to
Line Fit Ending No.:	25	Max 62
Specify Output Units:	7	1 to 9
K(h):	1.12E-03	cm./sec.
Correlation Coefficient:	0.9976	



Meas. #	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Yt)	Regression On LN(Yt)
1)	0.00	8.33	0.00	#NUM!	1.502
2)	0.10	8.33	0.00	#NUM!	1.263
3)	0.01	8.33	0.00	#NUM!	1.478
4)	0.02	8.33	0.00	#NUM!	1.454
5)	0.02	8.34	0.01	-4.605	1.454
6)	0.02	8.35	0.02	-3.912	1.454
7)	0.03	8.34	0.01	-4.605	1.430
8)	0.03	8.36	0.03	-3.507	1.430
9)	0.05	10.58	2.25	0.811	1.382
10)	0.06	11.37	3.04	1.112	1.359
11)	0.08	12.22	3.89	1.358	1.311
12)	0.10	11.95	3.62	1.286	1.263
13)	0.11	11.78	3.45	1.238	1.239
14)	0.13	11.62	3.29	1.191	1.191
15)	0.15	11.49	3.16	1.151	1.144
16)	0.16	11.34	3.01	1.102	1.120
17)	0.18	11.22	2.89	1.061	1.072
18)	0.20	11.12	2.79	1.026	1.024
19)	0.21	11.00	2.67	0.982	1.000
20)	0.23	10.91	2.58	0.948	0.952
21)	0.25	10.81	2.48	0.908	0.905
22)	0.26	10.73	2.40	0.875	0.881
23)	0.28	10.63	2.30	0.833	0.833
24)	0.30	10.56	2.23	0.802	0.785
25)	0.31	10.48	2.15	0.765	0.761
26)	0.33	10.41	2.08	0.732	0.713
27)	0.41	10.10	1.77	0.571	0.522
28)	0.50	9.88	1.55	0.438	0.307
29)	0.58	9.69	1.36	0.307	0.116
30)	0.66	9.54	1.21	0.191	-0.075
31)	0.75	9.40	1.07	0.068	-0.290
32)	0.83	9.30	0.97	-0.030	-0.481
33)	0.91	9.20	0.87	-0.139	-0.672
34)	1.00	9.13	0.80	-0.223	-0.887
35)	1.08	9.05	0.72	-0.329	-1.078

Bouwer & Rice Method for Calculating Hydraulic Conductivity

Project: Subsurface Investigation Project No.: 43015.01

Client Name: Wilsonart - Congers, NY Identification: MW-6

36)	1.16	9.00	0.67	-0.400	-1.269
37)	1.25	8.95	0.62	-0.478	-1.484
38)	1.33	8.90	0.57	-0.562	-1.676
39)	1.41	8.86	0.53	-0.635	-1.867
40)	1.50	8.83	0.50	-0.693	-2.082
41)	1.58	8.80	0.47	-0.755	-2.273
42)	1.66	8.76	0.43	-0.844	-2.464
43)	1.75	8.74	0.41	-0.892	-2.679
44)	1.83	8.71	0.38	-0.968	-2.870
45)	1.91	8.69	0.36	-1.022	-3.061
46)	2.00	8.67	0.34	-1.079	-3.276
47)	2.50	8.59	0.26	-1.347	-4.471
48)	3.00	8.53	0.20	-1.609	-5.665
49)	3.50	8.49	0.16	-1.833	-6.860
50)	4.00	8.47	0.14	-1.966	-8.054
51)	4.50	8.45	0.12	-2.120	-9.249
52)	5.00	8.43	0.10	-2.303	-10.443
53)	5.50	8.41	0.08	-2.526	-11.638
54)	6.00	8.41	0.08	-2.526	-12.832
55)	6.50	8.40	0.07	-2.659	-14.027
56)	7.00	8.40	0.07	-2.659	-15.221
57)	7.50	8.39	0.06	-2.813	-16.416
58)	8.00	8.39	0.06	-2.813	-17.610
59)	8.50	8.39	0.06	-2.813	-18.805
60)	9.00	8.38	0.05	-2.996	-20.000
61)	9.50	8.38	0.05	-2.996	-21.194
62)	10.00	8.37	0.04	-3.219	-22.389

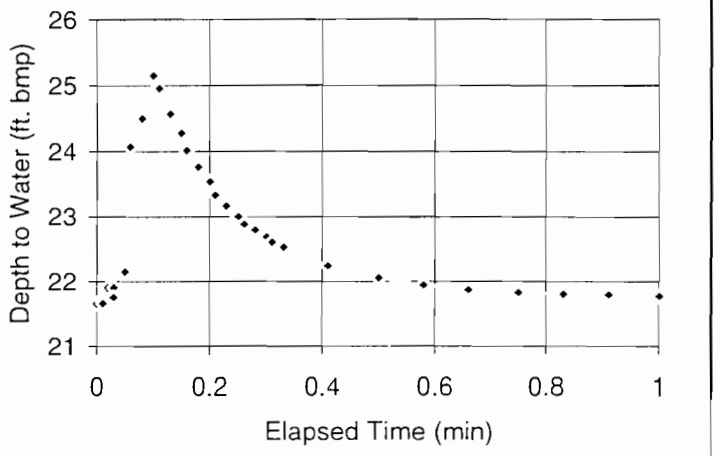
SLUG TEST DATA ENTRY FORM

Client Name: Wilsonart - Congers, NY
Project No.: 43015.01
Project Name: Subsurface Investigation

Well Number: MW-7
Gnd. Elev.: 192.7
Tested By: MAW

Test Type: Bail
Weather:
Run Date: 1.25.2001

BASIC TEST DATA	
Measurement Units (1-6):	2
Unconfined(1)/Confined(2):	1
Well Depth - TOC (feet):	42.96
Static W/L-Depth (ft.):	21.66
Riser Pipe Diameter (feet):	0.17
Initial Test Depth Value (ft.):	
TOC Elevation (feet):	194.76
Intake/Soil Col. Diam. (feet):	0.33
Depth to Top of Pack (feet):	17
Pack/Soil Col. Length (ft.):	24
Saturat. Col. Thickness (ft.):	21.4
Casing Soil Length (if appl.):	
Casing Stickup (feet):	2.06
Slug Volume (ft3):	0.13
Thickness of Aquifer (feet):	50



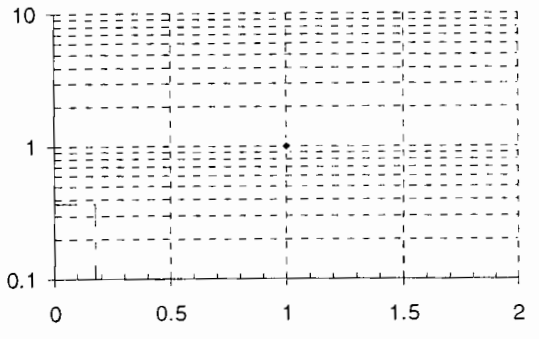
AQUIFER RECOVERY DATA

Time (min)	Depth (ft.)	Time (min)	Depth (ft.)	Time (min)	Depth (ft.)	Time (min)	Depth (ft.)
0	21.66	0.33	22.53	4.5	21.69		
0.01	21.71	0.41	22.24	5	21.68		
0.01	21.66	0.5	22.05	5.5	21.68		
0.02	21.9	0.58	21.94	6	21.68		
0.02	21.86	0.66	21.87	6.5	21.68		
0.02	21.9	0.75	21.83	7	21.67		
0.03	21.9	0.83	21.8	7.5	21.67		
0.03	21.75	0.91	21.79	8	21.67		
0.05	22.15	1	21.77	8.5	21.67		
0.06	24.07	1.08	21.75	9	21.67		
0.08	24.49	1.16	21.75	9.5	21.67		
0.1	25.14	1.25	21.75	10	21.66		
0.11	24.95	1.33	21.74				
0.13	24.56	1.41	21.74				
0.15	24.27	1.5	21.74				
0.16	24.01	1.58	21.73				
0.18	23.76	1.66	21.73				
0.2	23.53	1.75	21.73				
0.21	23.33	1.83	21.72				
0.23	23.16	1.91	21.72				
0.25	23	2	21.71				
0.26	22.88	2.5	21.7				
0.28	22.79	3	21.7				
0.3	22.69	3.5	21.69				
0.31	22.61	4	21.69				

Hvorslev's Method for Calculating Hydraulic Conductivity

Project Name: Subsurface Investigation
Project No.: 43015.01
Client Name: Wilsonart - Congers, NY
Run Date: 1.25.01
User Name: MAW
Identification: MW-7

Test Type:	7	1 to 7
Riser Pipe Diameter:	0.17	feet
Intake Diam.:	0.33	feet
Pack Length:	24	feet
Water Table Depth:	21.66	feet
Line Fit Starting No.:	13	Min 1 to
Line Fit Ending No.:	32	Max 62
Entrapped Air Correct.:	N	Y or N
Specify Output Units:	7	1 to 9
K(h):	2.17E-03	cm./sec.
Basic Time Lag (min.):	0.18	
Correlation Coefficient:	0.9896	



Meas. No.	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Hi/H-HO)	Regression To LN(Hi/H-HO)
1)	0.00	21.66	0.00	#NUM!	0.2893
2)	0.01	21.71	0.05	-4.1866	0.2442
3)	0.01	21.66	0.00	#NUM!	0.2442
4)	0.02	21.90	0.24	-2.6180	0.1990
5)	0.02	21.86	0.20	-2.8003	0.1990
6)	0.02	21.90	0.24	-2.6180	0.1990
7)	0.03	21.90	0.24	-2.6180	0.1538
8)	0.03	21.75	0.09	-3.5988	0.1538
9)	0.05	22.15	0.49	-1.9042	0.0635
10)	0.06	24.07	2.41	-0.3113	0.0183
11)	0.08	24.49	2.83	-0.1506	-0.0721
12)	0.10	25.14	3.48	0.0561	-0.1624
13)	0.11	24.95	3.29	0.0000	-0.2076
14)	0.13	24.56	2.90	-0.1262	-0.2979
15)	0.15	24.27	2.61	-0.2315	-0.3883
16)	0.16	24.01	2.35	-0.3365	-0.4335
17)	0.18	23.76	2.10	-0.4490	-0.5238
18)	0.20	23.53	1.87	-0.5649	-0.6142
19)	0.21	23.33	1.67	-0.6781	-0.6593
20)	0.23	23.16	1.50	-0.7854	-0.7497
21)	0.25	23.00	1.34	-0.8982	-0.8400
22)	0.26	22.88	1.22	-0.9920	-0.8852
23)	0.28	22.79	1.13	-1.0687	-0.9756
24)	0.30	22.69	1.03	-1.1613	-1.0659
25)	0.31	22.61	0.95	-1.2422	-1.1111
26)	0.33	22.53	0.87	-1.3301	-1.2014
27)	0.41	22.24	0.58	-1.7356	-1.5628
28)	0.50	22.05	0.39	-2.1325	-1.9694
29)	0.58	21.94	0.28	-2.4639	-2.3308
30)	0.66	21.87	0.21	-2.7515	-2.6922
31)	0.75	21.83	0.17	-2.9628	-3.0988
32)	0.83	21.80	0.14	-3.1570	-3.4601
33)	0.91	21.79	0.13	-3.2311	-3.8215
34)	1.00	21.77	0.11	-3.3982	-4.2281
35)	1.08	21.75	0.09	-3.5988	-4.5895
36)	1.16	21.75	0.09	-3.5988	-4.9509

Hvorslev's Method for Calculating Hydraulic Conductivity

Project Name: Subsurface Investigation
Project No.: 43015.01
Client Name: Wilsonart - Congers, NY
Run Date: 1.25.01
User Name: MAW
Identification: MW-7

37)	1.25	21.75	0.09	-3.5988	-5.3575
38)	1.33	21.74	0.08	-3.7166	-5.7189
39)	1.41	21.74	0.08	-3.7166	-6.0803
40)	1.50	21.74	0.08	-3.7166	-6.4868
41)	1.58	21.73	0.07	-3.8501	-6.8482
42)	1.66	21.73	0.07	-3.8501	-7.2096
43)	1.75	21.73	0.07	-3.8501	-7.6162
44)	1.83	21.72	0.06	-4.0043	-7.9776
45)	1.91	21.72	0.06	-4.0043	-8.3390
46)	2.00	21.71	0.05	-4.1866	-8.7456
47)	2.50	21.70	0.04	-4.4098	-11.0043
48)	3.00	21.70	0.04	-4.4098	-13.2630
49)	3.50	21.69	0.03	-4.6974	-15.5217
50)	4.00	21.69	0.03	-4.6974	-17.7805
51)	4.50	21.69	0.03	-4.6974	-20.0392
52)	5.00	21.68	0.02	-5.1029	-22.2979
53)	5.50	21.68	0.02	-5.1029	-24.5566
54)	6.00	21.68	0.02	-5.1029	-26.8154
55)	6.50	21.68	0.02	-5.1029	-29.0741
56)	7.00	21.67	0.01	-5.7961	-31.3328
57)	7.50	21.67	0.01	-5.7961	-33.5915
58)	8.00	21.67	0.01	-5.7961	-35.8503
59)	8.50	21.67	0.01	-5.7961	-38.1090
60)	9.00	21.67	0.01	-5.7961	-40.3677
61)	9.50	21.67	0.01	-5.7961	-42.6264
62)	10.00	21.66	0.00	#NUM!	-44.8852

Hvorslev's Method for Calculating Hydraulic Conductivity

Project Name: Subsurface Investigation
Project No.: 43015.01
Client Name: Wilsonart - Congers, NY
Run Date: 1.25.01
User Name: MAW
Identification: MW-7

37)	1.25	21.75	0.09	-3.5988	-5.3575
38)	1.33	21.74	0.08	-3.7166	-5.7189
39)	1.41	21.74	0.08	-3.7166	-6.0803
40)	1.50	21.74	0.08	-3.7166	-6.4868
41)	1.58	21.73	0.07	-3.8501	-6.8482
42)	1.66	21.73	0.07	-3.8501	-7.2096
43)	1.75	21.73	0.07	-3.8501	-7.6162
44)	1.83	21.72	0.06	-4.0043	-7.9776
45)	1.91	21.72	0.06	-4.0043	-8.3390
46)	2.00	21.71	0.05	-4.1866	-8.7456
47)	2.50	21.70	0.04	-4.4098	-11.0043
48)	3.00	21.70	0.04	-4.4098	-13.2630
49)	3.50	21.69	0.03	-4.6974	-15.5217
50)	4.00	21.69	0.03	-4.6974	-17.7805
51)	4.50	21.69	0.03	-4.6974	-20.0392
52)	5.00	21.68	0.02	-5.1029	-22.2979
53)	5.50	21.68	0.02	-5.1029	-24.5566
54)	6.00	21.68	0.02	-5.1029	-26.8154
55)	6.50	21.68	0.02	-5.1029	-29.0741
56)	7.00	21.67	0.01	-5.7961	-31.3328
57)	7.50	21.67	0.01	-5.7961	-33.5915
58)	8.00	21.67	0.01	-5.7961	-35.8503
59)	8.50	21.67	0.01	-5.7961	-38.1090
60)	9.00	21.67	0.01	-5.7961	-40.3677
61)	9.50	21.67	0.01	-5.7961	-42.6264
62)	10.00	21.66	0.00	#NUM!	-44.8852

Bouwer & Rice Method for Calculating Hydraulic Conductivity

Project: Subsurface Investigation Project No.: 43015.01

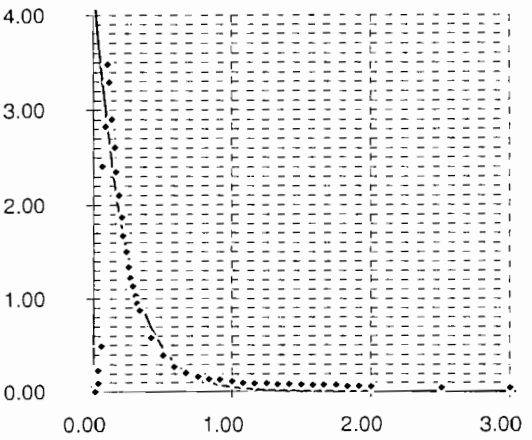
Client Name: Wilsonart - Congers, NY Identification: MW-7

36)	1.16	21.75	0.09	-2.408	-3.760
37)	1.25	21.75	0.09	-2.408	-4.167
38)	1.33	21.74	0.08	-2.526	-4.528
39)	1.41	21.74	0.08	-2.526	-4.889
40)	1.50	21.74	0.08	-2.526	-5.296
41)	1.58	21.73	0.07	-2.659	-5.657
42)	1.66	21.73	0.07	-2.659	-6.019
43)	1.75	21.73	0.07	-2.659	-6.425
44)	1.83	21.72	0.06	-2.813	-6.787
45)	1.91	21.72	0.06	-2.813	-7.148
46)	2.00	21.71	0.05	-2.996	-7.555
47)	2.50	21.70	0.04	-3.219	-9.813
48)	3.00	21.70	0.04	-3.219	-12.072
49)	3.50	21.69	0.03	-3.507	-14.331
50)	4.00	21.69	0.03	-3.507	-16.590
51)	4.50	21.69	0.03	-3.507	-18.848
52)	5.00	21.68	0.02	-3.912	-21.107
53)	5.50	21.68	0.02	-3.912	-23.366
54)	6.00	21.68	0.02	-3.912	-25.624
55)	6.50	21.68	0.02	-3.912	-27.883
56)	7.00	21.67	0.01	-4.605	-30.142
57)	7.50	21.67	0.01	-4.605	-32.401
58)	8.00	21.67	0.01	-4.605	-34.659
59)	8.50	21.67	0.01	-4.605	-36.918
60)	9.00	21.67	0.01	-4.605	-39.177
61)	9.50	21.67	0.01	-4.605	-41.436
62)	10.00	21.66	0.00	#NUM!	-43.694

Bouwer & Rice Method for Calculating Hydraulic Conductivity

Project: Subsurface Investigation
Project No.: 43015.01
Client Name: Wilsonart - Congers, NY
Identification: MW-7
User Name: MAW
Run Date: 1.25.01

Riser Pipe Diameter:	0.17	feet
Intake Diameter:	0.33	feet
Screen Length:	24	feet
Saturated Column Length:	21.4	feet
Water Table Depth:	21.66	feet
Aquifer Thickness:	50	feet
Line Fit Starting No.:	13	Min 1 to
Line Fit Ending No.:	32	Max 62
Specify Output Units:	7	1 to 9
K(h):	1.18E-03	cm./sec.
Correlation Coefficient:	0.9896	



Meas. #	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Yt)	Regression On LN(Yt)
1)	0.00	21.66	0.00	#NUM!	1.480
2)	0.01	21.71	0.05	-2.996	1.435
3)	0.01	21.66	0.00	#NUM!	1.435
4)	0.02	21.90	0.24	-1.427	1.390
5)	0.02	21.86	0.20	-1.609	1.390
6)	0.02	21.90	0.24	-1.427	1.390
7)	0.03	21.90	0.24	-1.427	1.345
8)	0.03	21.75	0.09	-2.408	1.345
9)	0.05	22.15	0.49	-0.713	1.254
10)	0.06	24.07	2.41	0.880	1.209
11)	0.08	24.49	2.83	1.040	1.119
12)	0.10	25.14	3.48	1.247	1.028
13)	0.11	24.95	3.29	1.191	0.983
14)	0.13	24.56	2.90	1.065	0.893
15)	0.15	24.27	2.61	0.959	0.803
16)	0.16	24.01	2.35	0.854	0.757
17)	0.18	23.76	2.10	0.742	0.667
18)	0.20	23.53	1.87	0.626	0.577
19)	0.21	23.33	1.67	0.513	0.532
20)	0.23	23.16	1.50	0.405	0.441
21)	0.25	23.00	1.34	0.293	0.351
22)	0.26	22.88	1.22	0.199	0.306
23)	0.28	22.79	1.13	0.122	0.215
24)	0.30	22.69	1.03	0.030	0.125
25)	0.31	22.61	0.95	-0.051	0.080
26)	0.33	22.53	0.87	-0.139	-0.011
27)	0.41	22.24	0.58	-0.545	-0.372
28)	0.50	22.05	0.39	-0.942	-0.779
29)	0.58	21.94	0.28	-1.273	-1.140
30)	0.66	21.87	0.21	-1.561	-1.501
31)	0.75	21.83	0.17	-1.772	-1.908
32)	0.83	21.80	0.14	-1.966	-2.269
33)	0.91	21.79	0.13	-2.040	-2.631
34)	1.00	21.77	0.11	-2.207	-3.037
35)	1.08	21.75	0.09	-2.408	-3.399

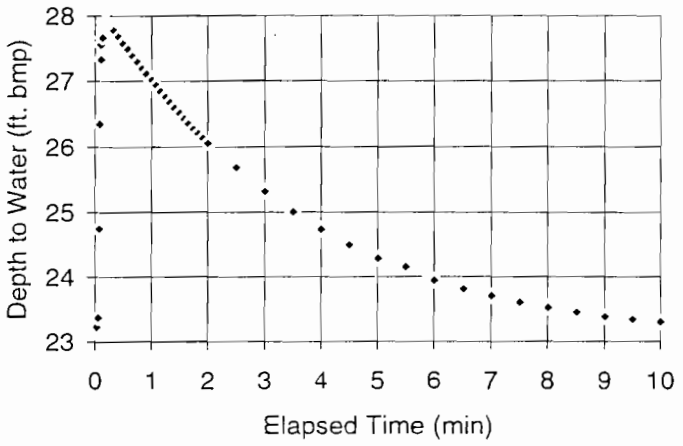
SLUG TEST DATA ENTRY FORM

Client Name: Wilsonart - Congers, NY
Project No.: 43015.01
Project Name: Subsurface Investigation

Well Number: MW-8
Gnd. Elev.: 195.68
Tested By: MAW

Test Type: Bail
Weather:
Run Date: 1.25.2001

BASIC TEST DATA	
Measurement Units (1-6):	2
Unconfined(1)/Confined(2):	1
Well Depth - TOC (feet):	46.23
Static W/L-Depth (ft.):	23.15
Riser Pipe Diameter (feet):	0.17
Initial Test Depth Value (ft.):	
TOC Elevation (feet):	197.58
Intake/Soil Col. Diam. (feet):	0.33
Depth to Top of Pack (feet):	22.5
Pack/Soil Col. Length (ft.):	22.5
Saturat. Col. Thickness (ft.):	23.75
Casing Soil Length (if appl.):	
Casing Stickup (feet):	1.90
Slug Volume (ft3):	0.13
Thickness of Aquifer (feet):	50



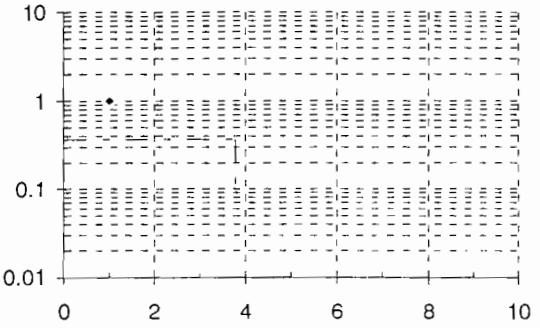
AQUIFER RECOVERY DATA

Time (min)	Depth (ft.)	Time (min)	Depth (ft.)	Time (min)	Depth (ft.)	Time (min)	Depth (ft.)
0	23.15	0.33	27.77	4.5	24.49		
0.01	23.16	0.41	27.67	5	24.28		
0.01	23.17	0.5	27.57	5.5	24.15		
0.02	23.16	0.58	27.48	6	23.94		
0.02	23.19	0.66	27.38	6.5	23.81		
0.02	23.18	0.75	27.29	7	23.7		
0.03	23.18	0.83	27.19	7.5	23.6		
0.03	23.23	0.91	27.11	8	23.52		
0.05	23.37	1	27.01	8.5	23.45		
0.06	24.74	1.08	26.93	9	23.38		
0.08	26.36	1.16	26.84	9.5	23.34		
0.1	27.56	1.25	26.76	10	23.3		
0.11	27.33	1.33	26.67				
0.13	27.66	1.41	26.59				
0.15	27.86	1.5	26.51				
0.16	27.88	1.58	26.43				
0.18	27.91	1.66	26.36				
0.2	27.91	1.75	26.28				
0.21	27.85	1.83	26.21				
0.23	27.88	1.91	26.14				
0.25	27.86	2	26.06				
0.26	27.84	2.5	25.68				
0.28	27.83	3	25.32				
0.3	27.81	3.5	25				
0.31	27.79	4	24.73				

Hvorslev's Method for Calculating Hydraulic Conductivity

Project Name: Subsurface Investigation
Project No.: 43015.01
Client Name: Wilsonart - Congers, NY
Run Date: 1.25.01
User Name: MAW
Identification: MW-8

Test Type:	7	1 to 7
Riser Pipe Diameter:	0.17	feet
Intake Diam.:	0.33	feet
Pack Length:	22.5	feet
Water Table Depth:	23.15	feet
Line Fit Starting No.:	19	Min 1 to
Line Fit Ending No.:	40	Max 62
Entrapped Air Correct.:	N	Y or N
Specify Output Units:	7	1 to 9
K(h):	1.06E-04	cm./sec.
Basic Time Lag (min.):	3.78	
Correlation Coefficient:	0.9995	



Meas. No.	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Hi/H-HO)	Regression To LN(Hi/H-HO)
1)	0.00	23.15	0.00	#NUM!	0.0696
2)	0.01	23.16	0.01	-6.1527	0.0669
3)	0.01	23.17	0.02	-5.4596	0.0669
4)	0.02	23.16	0.01	-6.1527	0.0642
5)	0.02	23.19	0.04	-4.7664	0.0642
6)	0.02	23.18	0.03	-5.0541	0.0642
7)	0.03	23.18	0.03	-5.0541	0.0615
8)	0.03	23.23	0.08	-4.0733	0.0615
9)	0.05	23.37	0.22	-3.0617	0.0562
10)	0.06	24.74	1.59	-1.0838	0.0535
11)	0.08	26.36	3.21	-0.3813	0.0482
12)	0.10	27.56	4.41	-0.0637	0.0428
13)	0.11	27.33	4.18	-0.1173	0.0401
14)	0.13	27.66	4.51	-0.0413	0.0348
15)	0.15	27.86	4.71	0.0021	0.0294
16)	0.16	27.88	4.73	0.0064	0.0267
17)	0.18	27.91	4.76	0.0127	0.0214
18)	0.20	27.91	4.76	0.0127	0.0160
19)	0.21	27.85	4.70	0.0000	0.0133
20)	0.23	27.88	4.73	0.0064	0.0080
21)	0.25	27.86	4.71	0.0021	0.0026
22)	0.26	27.84	4.69	-0.0021	-0.0001
23)	0.28	27.83	4.68	-0.0043	-0.0054
24)	0.30	27.81	4.66	-0.0085	-0.0108
25)	0.31	27.79	4.64	-0.0128	-0.0134
26)	0.33	27.77	4.62	-0.0172	-0.0188
27)	0.41	27.67	4.52	-0.0391	-0.0402
28)	0.50	27.57	4.42	-0.0614	-0.0643
29)	0.58	27.48	4.33	-0.0820	-0.0858
30)	0.66	27.38	4.23	-0.1054	-0.1072
31)	0.75	27.29	4.14	-0.1269	-0.1313
32)	0.83	27.19	4.04	-0.1513	-0.1527
33)	0.91	27.11	3.96	-0.1713	-0.1741
34)	1.00	27.01	3.86	-0.1969	-0.1982
35)	1.08	26.93	3.78	-0.2178	-0.2197
36)	1.16	26.84	3.69	-0.2419	-0.2411

Hvorslev's Method for Calculating Hydraulic Conductivity

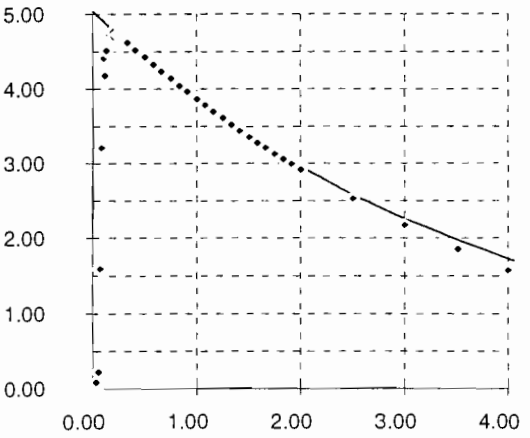
Project Name: Subsurface Investigation
Project No.: 43015.01
Client Name: Wilsonart - Congers, NY
Run Date: 1.25.01
User Name: MAW
Identification: MW-8

37)	1.25	26.76	3.61	-0.2639	-0.2652
38)	1.33	26.67	3.52	-0.2891	-0.2866
39)	1.41	26.59	3.44	-0.3121	-0.3080
40)	1.50	26.51	3.36	-0.3356	-0.3321
41)	1.58	26.43	3.28	-0.3597	-0.3536
42)	1.66	26.36	3.21	-0.3813	-0.3750
43)	1.75	26.28	3.13	-0.4065	-0.3991
44)	1.83	26.21	3.06	-0.4291	-0.4205
45)	1.91	26.14	2.99	-0.4523	-0.4420
46)	2.00	26.06	2.91	-0.4794	-0.4661
47)	2.50	25.68	2.53	-0.6193	-0.6000
48)	3.00	25.32	2.17	-0.7728	-0.7339
49)	3.50	25.00	1.85	-0.9324	-0.8678
50)	4.00	24.73	1.58	-1.0901	-1.0017
51)	4.50	24.49	1.34	-1.2549	-1.1356
52)	5.00	24.28	1.13	-1.4253	-1.2695
53)	5.50	24.15	1.00	-1.5476	-1.4034
54)	6.00	23.94	0.79	-1.7833	-1.5373
55)	6.50	23.81	0.66	-1.9631	-1.6712
56)	7.00	23.70	0.55	-2.1454	-1.8051
57)	7.50	23.60	0.45	-2.3461	-1.9391
58)	8.00	23.52	0.37	-2.5418	-2.0730
59)	8.50	23.45	0.30	-2.7515	-2.2069
60)	9.00	23.38	0.23	-3.0172	-2.3408
61)	9.50	23.34	0.19	-3.2083	-2.4747
62)	10.00	23.30	0.15	-3.4447	-2.6086

Bouwer & Rice Method for Calculating Hydraulic Conductivity

Project: Subsurface Investigation
Project No.: 43015.01
Client Name: Wilsonart - Congers, NY
Identification: MW-8
User Name: MAW
Run Date: 1.25.01

Riser Pipe Diameter:	0.17	feet
Intake Diameter:	0.33	feet
Screen Length:	22.5	feet
Saturated Column Length:	23.75	feet
Water Table Depth:	23.15	feet
Aquifer Thickness:	50	feet
Line Fit Starting No.:	19	Min 1 to
Line Fit Ending No.:	40	Max 62
Specify Output Units:	7	1 to 9
K(h):	7.54E-05	cm./sec.
Correlation Coefficient:	0.9995	

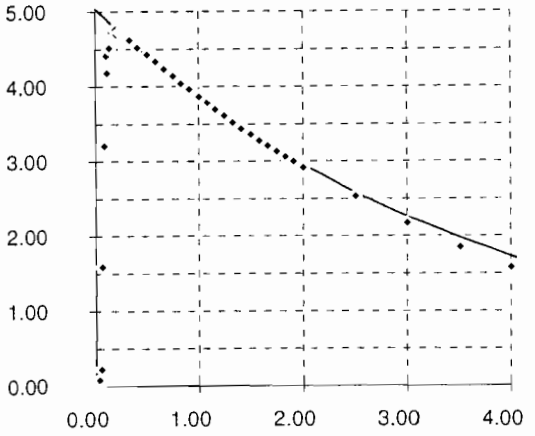


Meas. #	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Yt)	Regression On LN(Yt)
1)	0.00	23.15	0.00	#NUM!	1.617
2)	0.01	23.16	0.01	-4.605	1.614
3)	0.01	23.17	0.02	-3.912	1.614
4)	0.02	23.16	0.01	-4.605	1.612
5)	0.02	23.19	0.04	-3.219	1.612
6)	0.02	23.18	0.03	-3.507	1.612
7)	0.03	23.18	0.03	-3.507	1.609
8)	0.03	23.23	0.08	-2.526	1.609
9)	0.05	23.37	0.22	-1.514	1.604
10)	0.06	24.74	1.59	0.464	1.601
11)	0.08	26.36	3.21	1.166	1.596
12)	0.10	27.56	4.41	1.484	1.590
13)	0.11	27.33	4.18	1.430	1.588
14)	0.13	27.66	4.51	1.506	1.582
15)	0.15	27.86	4.71	1.550	1.577
16)	0.16	27.88	4.73	1.554	1.574
17)	0.18	27.91	4.76	1.560	1.569
18)	0.20	27.91	4.76	1.560	1.564
19)	0.21	27.85	4.70	1.548	1.561
20)	0.23	27.88	4.73	1.554	1.556
21)	0.25	27.86	4.71	1.550	1.550
22)	0.26	27.84	4.69	1.545	1.548
23)	0.28	27.83	4.68	1.543	1.542
24)	0.30	27.81	4.66	1.539	1.537
25)	0.31	27.79	4.64	1.535	1.534
26)	0.33	27.77	4.62	1.530	1.529
27)	0.41	27.67	4.52	1.509	1.507
28)	0.50	27.57	4.42	1.486	1.483
29)	0.58	27.48	4.33	1.466	1.462
30)	0.66	27.38	4.23	1.442	1.440
31)	0.75	27.29	4.14	1.421	1.416
32)	0.83	27.19	4.04	1.396	1.395
33)	0.91	27.11	3.96	1.376	1.373
34)	1.00	27.01	3.86	1.351	1.349
35)	1.08	26.93	3.78	1.330	1.328

Bouwer & Rice Method for Calculating Hydraulic Conductivity

Project: Subsurface Investigation
Project No.: 43015.01
Client Name: Wilsonart - Congers, NY
Identification: MW-8
User Name: MAW
Run Date: 1.25.01

Riser Pipe Diameter:	0.17	feet
Intake Diameter:	0.33	feet
Screen Length:	22.5	feet
Saturated Column Length:	23.75	feet
Water Table Depth:	23.15	feet
Aquifer Thickness:	50	feet
Line Fit Starting No.:	19	Min 1 to
Line Fit Ending No.:	40	Max 62
Specify Output Units:	7	1 to 9
K(h):	7.54E-05	cm./sec.
Correlation Coefficient:	0.9995	



Meas. #	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Yt)	Regression On LN(Yt)
1)	0.00	23.15	0.00	#NUM!	1.617
2)	0.01	23.16	0.01	-4.605	1.614
3)	0.01	23.17	0.02	-3.912	1.614
4)	0.02	23.16	0.01	-4.605	1.612
5)	0.02	23.19	0.04	-3.219	1.612
6)	0.02	23.18	0.03	-3.507	1.612
7)	0.03	23.18	0.03	-3.507	1.609
8)	0.03	23.23	0.08	-2.526	1.609
9)	0.05	23.37	0.22	-1.514	1.604
10)	0.06	24.74	1.59	0.464	1.601
11)	0.08	26.36	3.21	1.166	1.596
12)	0.10	27.56	4.41	1.484	1.590
13)	0.11	27.33	4.18	1.430	1.588
14)	0.13	27.66	4.51	1.506	1.582
15)	0.15	27.86	4.71	1.550	1.577
16)	0.16	27.88	4.73	1.554	1.574
17)	0.18	27.91	4.76	1.560	1.569
18)	0.20	27.91	4.76	1.560	1.564
19)	0.21	27.85	4.70	1.548	1.561
20)	0.23	27.88	4.73	1.554	1.556
21)	0.25	27.86	4.71	1.550	1.550
22)	0.26	27.84	4.69	1.545	1.548
23)	0.28	27.83	4.68	1.543	1.542
24)	0.30	27.81	4.66	1.539	1.537
25)	0.31	27.79	4.64	1.535	1.534
26)	0.33	27.77	4.62	1.530	1.529
27)	0.41	27.67	4.52	1.509	1.507
28)	0.50	27.57	4.42	1.486	1.483
29)	0.58	27.48	4.33	1.466	1.462
30)	0.66	27.38	4.23	1.442	1.440
31)	0.75	27.29	4.14	1.421	1.416
32)	0.83	27.19	4.04	1.396	1.395
33)	0.91	27.11	3.96	1.376	1.373
34)	1.00	27.01	3.86	1.351	1.349
35)	1.08	26.93	3.78	1.330	1.328

Bouwer & Rice Method for Calculating Hydraulic Conductivity

Project: Subsurface Investigation Project No.: 43015.01

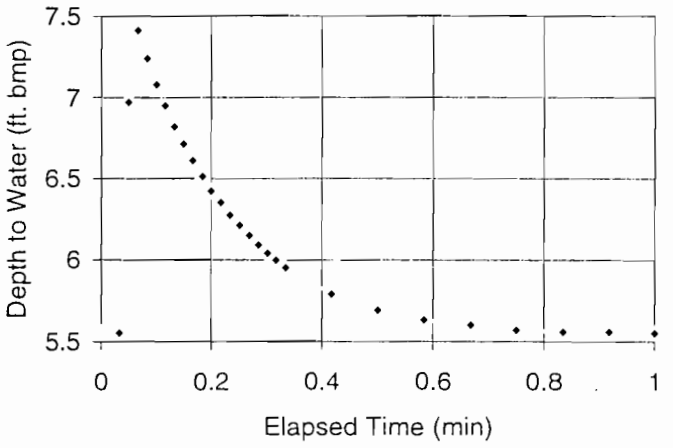
Client Name: Wilsonart - Congers, NY Identification: MW-8

36)	1.16	26.84	3.69	1.306	1.306
37)	1.25	26.76	3.61	1.284	1.282
38)	1.33	26.67	3.52	1.258	1.261
39)	1.41	26.59	3.44	1.235	1.240
40)	1.50	26.51	3.36	1.212	1.215
41)	1.58	26.43	3.28	1.188	1.194
42)	1.66	26.36	3.21	1.166	1.173
43)	1.75	26.28	3.13	1.141	1.148
44)	1.83	26.21	3.06	1.118	1.127
45)	1.91	26.14	2.99	1.095	1.106
46)	2.00	26.06	2.91	1.068	1.082
47)	2.50	25.68	2.53	0.928	0.948
48)	3.00	25.32	2.17	0.775	0.814
49)	3.50	25.00	1.85	0.615	0.680
50)	4.00	24.73	1.58	0.457	0.546
51)	4.50	24.49	1.34	0.293	0.412
52)	5.00	24.28	1.13	0.122	0.278
53)	5.50	24.15	1.00	0.000	0.144
54)	6.00	23.94	0.79	-0.236	0.010
55)	6.50	23.81	0.66	-0.416	-0.124
56)	7.00	23.70	0.55	-0.598	-0.258
57)	7.50	23.60	0.45	-0.799	-0.391
58)	8.00	23.52	0.37	-0.994	-0.525
59)	8.50	23.45	0.30	-1.204	-0.659
60)	9.00	23.38	0.23	-1.470	-0.793
61)	9.50	23.34	0.19	-1.661	-0.927
62)	10.00	23.30	0.15	-1.897	-1.061

SLUG TEST DATA ENTRY FORM

Client Name: Wilsonart - Congers, NY Well Number: MW-9 Test Type: Bail
Project No.: 43015.01 Gnd. Elev.: 168.68 Weather:
Project Name: Subsurface Investigation Tested By: MAW Run Date: 1.25.2001

BASIC TEST DATA	
Measurement Units (1-6):	2
Unconfined(1)/Confined(2):	1
Well Depth - TOC (feet):	32.55
Static W/L-Depth (ft.):	5.91
Riser Pipe Diameter (feet):	0.17
Initial Test Depth Value (ft.):	
TOC Elevation (feet):	170.3
Intake/Soil Col. Diam. (feet):	0.33
Depth to Top of Pack (feet):	18.5
Pack/Soil Col. Length (ft.):	12.5
Saturat. Col. Thickness (ft.):	26.64
Casing Soil Length (if appl.):	
Casing Stickup (feet):	1.62
Slug Volume (ft3):	0.13
Thickness of Aquifer (feet):	50



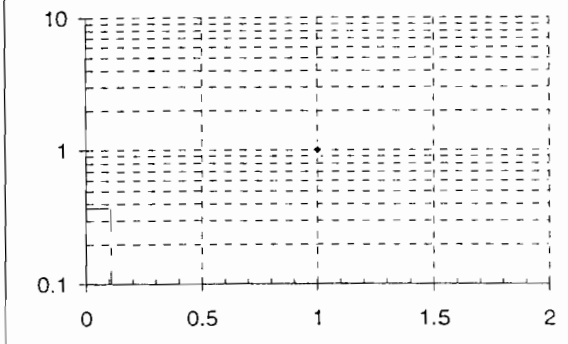
AQUIFER RECOVERY DATA

Time (min)	Depth (ft.)	Time (min)	Depth (ft.)	Time (min)	Depth (ft.)	Time (min)	Depth (ft.)
0	5.55	0.2833	6.09	3	5.54		
0.0033	5.56	0.3	6.04	3.5	5.54		
0.0066	5.56	0.3166	6	4	5.53		
0.0099	5.56	0.3333	5.95	4.5	5.54		
0.0133	5.56	0.4167	5.79	5	5.53		
0.0166	5.55	0.5	5.69	5.5	5.53		
0.02	5.55	0.5833	5.63	6	5.53		
0.0233	5.56	0.6667	5.6	6.5	5.53		
0.0266	5.55	0.75	5.57	7	5.53		
0.03	5.55	0.8333	5.56	7.5	5.53		
0.0333	5.55	0.9167	5.56	8	5.53		
0.05	6.97	1	5.55	8.5	5.52		
0.0666	7.41	1.0833	5.55	9	5.52		
0.0833	7.24	1.1667	5.54	9.5	5.52		
0.1	7.08	1.25	5.54	10	5.52		
0.1166	6.95	1.3333	5.54	12	5.53		
0.1333	6.82	1.4166	5.54	14	5.54		
0.15	6.71	1.5	5.54	16	5.54		
0.1666	6.61	1.5833	5.54	18	5.53		
0.1833	6.51	1.6667	5.54	20	5.54		
0.2	6.42	1.75	5.54	22	5.54		
0.2166	6.35	1.8333	5.54	24	5.54		
0.2333	6.27	1.9167	5.54				
0.25	6.21	2	5.54				
0.2666	6.15	2.5	5.54				

Hvorslev's Method for Calculating Hydraulic Conductivity

Project Name: Subsurface Investigation
Project No.: 43015.01
Client Name: Wilsonart - Congers, NY
Run Date: 1.25.01
User Name: MAW
Identification: MW-9

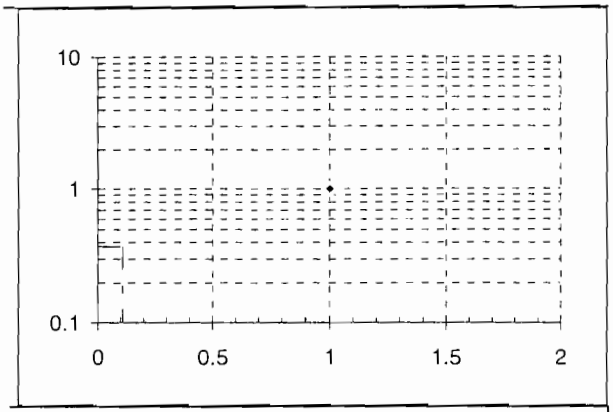
Test Type:	7	1 to 7
Riser Pipe Diameter:	0.17	feet
Intake Diam.:	0.33	feet
Pack Length:	12.5	feet
Water Table Depth:	5.91	feet
Line Fit Starting No.:	14	Min 1 to
Line Fit Ending No.:	28	Max 67
Entrapped Air Correct.:	N	Y or N
Specify Output Units:	7	1 to 9
K(h):	5.84E-03	cm./sec.
Basic Time Lag (min.):	0.11	
Correlation Coefficient:	0.9839	



Meas. No.	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Hi/H-HO)	Regression To LN(Hi/H-HO)
1)	0.00	5.55	0.36	-1.3068	1.0873
2)	0.00	5.56	0.35	-1.3350	1.0514
3)	0.01	5.56	0.35	-1.3350	1.0156
4)	0.01	5.56	0.35	-1.3350	0.9797
5)	0.01	5.56	0.35	-1.3350	0.9427
6)	0.02	5.55	0.36	-1.3068	0.9069
7)	0.02	5.55	0.36	-1.3068	0.8699
8)	0.02	5.56	0.35	-1.3350	0.8341
9)	0.03	5.55	0.36	-1.3068	0.7982
10)	0.03	5.55	0.36	-1.3068	0.7612
11)	0.03	5.55	0.36	-1.3068	0.7254
12)	0.05	6.97	1.06	-0.2269	0.5439
13)	0.07	7.41	1.50	0.1203	0.3634
14)	0.08	7.24	1.33	0.0000	0.1819
15)	0.10	7.08	1.17	-0.1282	0.0004
16)	0.12	6.95	1.04	-0.2460	-0.1800
17)	0.13	6.82	0.91	-0.3795	-0.3615
18)	0.15	6.71	0.80	-0.5083	-0.5430
19)	0.17	6.61	0.70	-0.6419	-0.7234
20)	0.18	6.51	0.60	-0.7960	-0.9049
21)	0.20	6.42	0.51	-0.9585	-1.0864
22)	0.22	6.35	0.44	-1.1062	-1.2669
23)	0.23	6.27	0.36	-1.3068	-1.4484
24)	0.25	6.21	0.30	-1.4892	-1.6299
25)	0.27	6.15	0.24	-1.7123	-1.8103
26)	0.28	6.09	0.18	-2.0000	-1.9918
27)	0.30	6.04	0.13	-2.3254	-2.1733
28)	0.32	6.00	0.09	-2.6931	-2.3537
29)	0.33	5.95	0.04	-3.5041	-2.5352
30)	0.42	5.79	0.12	-2.4054	-3.4417
31)	0.50	5.69	0.22	-1.7993	-4.3471
32)	0.58	5.63	0.28	-1.5581	-5.2524
33)	0.67	5.60	0.31	-1.4564	-6.1589
34)	0.75	5.57	0.34	-1.3640	-7.0643
35)	0.83	5.56	0.35	-1.3350	-7.9696
36)	0.92	5.56	0.35	-1.3350	-8.8761

ıtin⁻ Hydraulic Conductivity

Project No.: 43015.01
Run Date: 1.25.01
Identification: MW-9



٧n/up	Line Fit To LN(Hi/H-HO)	Regression To LN(Hi/H-HO)
	-1.3068	1.0873
	-1.3350	1.0514
	-1.3350	1.0156
	-1.3350	0.9797
	-1.3350	0.9427
	-1.3068	0.9069
	-1.3068	0.8699
	-1.3350	0.8341
	-1.3068	0.7982
	-1.3068	0.7612
	-1.3068	0.7254
	-0.2269	0.5439
	0.1203	0.3634
	0.0000	0.1819
	-0.1282	0.0004
	-0.2460	-0.1800
	-0.3795	-0.3615
	-0.5083	-0.5430
	-0.6419	-0.7234
	-0.7960	-0.9049
	-0.9585	-1.0864
	-1.1062	-1.2669
	-1.3068	-1.4484
	-1.4892	-1.6299
	-1.7123	-1.8103
	-2.0000	-1.9918
	-2.3254	-2.1733
	-2.6931	-2.3537
	-3.5041	-2.5352
	-2.4054	-3.4417
	-1.7993	-4.3471
	-1.5581	-5.2524
	-1.4564	-6.1589
	-1.3640	-7.0643
	-1.3350	-7.9696
	-1.3350	-8.8761

ating Hydraulic Conductivity

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Project No.: 43015.01
Run Date: 1.25.01
Identification: MW-9

-1.3068	-9.7814
-1.3068	-10.6868
-1.2794	-11.5933
-1.2794	-12.4986
-1.2794	-13.4040
-1.2794	-14.3094
-1.2794	-15.2158
-1.2794	-16.1212
-1.2794	-17.0276
-1.2794	-17.9330
-1.2794	-18.8384
-1.2794	-19.7448
-1.2794	-20.6502
-1.2794	-26.0845
-1.2794	-31.5189
-1.2794	-36.9533
-1.2528	-42.3876
-1.2794	-47.8220
-1.2528	-53.2564
-1.2528	-58.6907
-1.2528	-64.1251
-1.2528	-69.5595
-1.2528	-74.9939
-1.2528	-80.4282
-1.2528	-85.8626
-1.2268	-91.2970
-1.2268	-96.7313
-1.2268	-102.1657
-1.2268	-107.6001
-1.2528	-129.3375
-1.2794	-151.0750

Hvorslev's Method for Calculating Hydraulic Conductivity

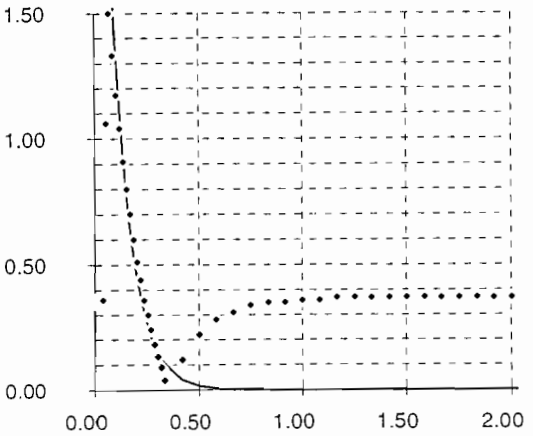
Project Name: Subsurface Investigation
Project No.: 43015.01
Client Name: Wilsonart - Congers, NY
Run Date: 1.25.01
User Name: MAW
Identification: MW-9

37)	1.00	5.55	0.36	-1.3068	-9.7814
38)	1.08	5.55	0.36	-1.3068	-10.6868
39)	1.17	5.54	0.37	-1.2794	-11.5933
40)	1.25	5.54	0.37	-1.2794	-12.4986
41)	1.33	5.54	0.37	-1.2794	-13.4040
42)	1.42	5.54	0.37	-1.2794	-14.3094
43)	1.50	5.54	0.37	-1.2794	-15.2158
44)	1.58	5.54	0.37	-1.2794	-16.1212
45)	1.67	5.54	0.37	-1.2794	-17.0276
46)	1.75	5.54	0.37	-1.2794	-17.9330
47)	1.83	5.54	0.37	-1.2794	-18.8384
48)	1.92	5.54	0.37	-1.2794	-19.7448
49)	2.00	5.54	0.37	-1.2794	-20.6502
50)	2.50	5.54	0.37	-1.2794	-26.0845
51)	3.00	5.54	0.37	-1.2794	-31.5189
52)	3.50	5.54	0.37	-1.2794	-36.9533
53)	4.00	5.53	0.38	-1.2528	-42.3876
54)	4.50	5.54	0.37	-1.2794	-47.8220
55)	5.00	5.53	0.38	-1.2528	-53.2564
56)	5.50	5.53	0.38	-1.2528	-58.6907
57)	6.00	5.53	0.38	-1.2528	-64.1251
58)	6.50	5.53	0.38	-1.2528	-69.5595
59)	7.00	5.53	0.38	-1.2528	-74.9939
60)	7.50	5.53	0.38	-1.2528	-80.4282
61)	8.00	5.53	0.38	-1.2528	-85.8626
62)	8.50	5.52	0.39	-1.2268	-91.2970
63)	9.00	5.52	0.39	-1.2268	-96.7313
64)	9.50	5.52	0.39	-1.2268	-102.1657
65)	10.00	5.52	0.39	-1.2268	-107.6001
66)	12.00	5.53	0.38	-1.2528	-129.3375
67)	14.00	5.54	0.37	-1.2794	-151.0750

Bouwer & Rice Method for Calculating Hydraulic Conductivity

Project: Subsurface Investigation
Project No.: 43015.01
Client Name: Wilsonart - Congers, NY
Identification: MW-9
User Name: MAW
Run Date: 1.25.01

Riser Pipe Diameter:	0.17	feet
Intake Diameter:	0.33	feet
Screen Length:	12.5	feet
Saturated Column Length:	26.64	feet
Water Table Depth:	5.91	feet
Aquifer Thickness:	50	feet
Line Fit Starting No.:	14	Min 1 to
Line Fit Ending No.:	28	Max 72
Specify Output Units:	7	1 to 9
K(h):	5.25E-03	cm./sec.
Correlation Coefficient:	0.9839	



Meas. #	Time minutes	Field Meas. feet	Drawdown/up feet	Line Fit To LN(Yt)	Regression On LN(Yt)
1)	0.00	5.55	0.36	-1.022	1.372
2)	0.00	5.56	0.35	-1.050	1.337
3)	0.01	5.56	0.35	-1.050	1.301
4)	0.01	5.56	0.35	-1.050	1.265
5)	0.01	5.56	0.35	-1.050	1.228
6)	0.02	5.55	0.36	-1.022	1.192
7)	0.02	5.55	0.36	-1.022	1.155
8)	0.02	5.56	0.35	-1.050	1.119
9)	0.03	5.55	0.36	-1.022	1.083
10)	0.03	5.55	0.36	-1.022	1.046
11)	0.03	5.55	0.36	-1.022	1.011
12)	0.05	6.97	1.06	0.058	0.829
13)	0.07	7.41	1.50	0.405	0.649
14)	0.08	7.24	1.33	0.285	0.467
15)	0.10	7.08	1.17	0.157	0.286
16)	0.12	6.95	1.04	0.039	0.105
17)	0.13	6.82	0.91	-0.094	-0.076
18)	0.15	6.71	0.80	-0.223	-0.258
19)	0.17	6.61	0.70	-0.357	-0.438
20)	0.18	6.51	0.60	-0.511	-0.620
21)	0.20	6.42	0.51	-0.673	-0.801
22)	0.22	6.35	0.44	-0.821	-0.982
23)	0.23	6.27	0.36	-1.022	-1.163
24)	0.25	6.21	0.30	-1.204	-1.345
25)	0.27	6.15	0.24	-1.427	-1.525
26)	0.28	6.09	0.18	-1.715	-1.707
27)	0.30	6.04	0.13	-2.040	-1.888
28)	0.32	6.00	0.09	-2.408	-2.069
29)	0.33	5.95	0.04	-3.219	-2.250
30)	0.42	5.79	0.12	-2.120	-3.157
31)	0.50	5.69	0.22	-1.514	-4.062
32)	0.58	5.63	0.28	-1.273	-4.967
33)	0.67	5.60	0.31	-1.171	-5.874
34)	0.75	5.57	0.34	-1.079	-6.779
35)	0.83	5.56	0.35	-1.050	-7.684

Bouwer & Rice Method for Calculating Hydraulic Conductivity

Project: Subsurface Investigation | Project No.: 43015.01

Client Name: Wilsonart - Congers, NY | Identification: MW-9

36)	0.92	5.56	0.35	-1.050	-8.591
37)	1.00	5.55	0.36	-1.022	-9.496
38)	1.08	5.55	0.36	-1.022	-10.402
39)	1.17	5.54	0.37	-0.994	-11.308
40)	1.25	5.54	0.37	-0.994	-12.213
41)	1.33	5.54	0.37	-0.994	-13.119
42)	1.42	5.54	0.37	-0.994	-14.024
43)	1.50	5.54	0.37	-0.994	-14.931
44)	1.58	5.54	0.37	-0.994	-15.836
45)	1.67	5.54	0.37	-0.994	-16.742
46)	1.75	5.54	0.37	-0.994	-17.648
47)	1.83	5.54	0.37	-0.994	-18.553
48)	1.92	5.54	0.37	-0.994	-19.460
49)	2.00	5.54	0.37	-0.994	-20.365
50)	2.50	5.54	0.37	-0.994	-25.799
51)	3.00	5.54	0.37	-0.994	-31.234
52)	3.50	5.54	0.37	-0.994	-36.668
53)	4.00	5.53	0.38	-0.968	-42.102
54)	4.50	5.54	0.37	-0.994	-47.537
55)	5.00	5.53	0.38	-0.968	-52.971
56)	5.50	5.53	0.38	-0.968	-58.406
57)	6.00	5.53	0.38	-0.968	-63.840
58)	6.50	5.53	0.38	-0.968	-69.274
59)	7.00	5.53	0.38	-0.968	-74.709
60)	7.50	5.53	0.38	-0.968	-80.143
61)	8.00	5.53	0.38	-0.968	-85.577
62)	8.50	5.52	0.39	-0.942	-91.012
63)	9.00	5.52	0.39	-0.942	-96.446
64)	9.50	5.52	0.39	-0.942	-101.881
65)	10.00	5.52	0.39	-0.942	-107.315
66)	12.00	5.53	0.38	-0.968	-129.052
67)	14.00	5.54	0.37	-0.994	-150.790
68)	16.00	5.54	0.37	-0.994	-172.527
69)	18.00	5.53	0.38	-0.968	-194.265
70)	20.00	5.54	0.37	-0.994	-216.002
71)	22.00	5.54	0.37	-0.994	-237.740
72)	24.00	5.54	0.37	-0.994	-259.477

APPENDIX F

LABORATORY ANALYTICAL REPORTS & DUSR – OCTOBER 2000 SOIL RESULTS

Organic Data Usability Summary Report
Congers/Wilsonart
Adirondack Environmental Services Laboratory
SDG # MW0712125

Analytical results for ten (10) soil samples from the above referenced site were reviewed to evaluate the data quality. Data were assessed in accordance with SW-846 Methods 8260, Rev. 3 (12/96), the United States Environmental Protection Agency (USEPA) document **USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review** (February 1994) and the USEPA Region II document **CLP Organics Data Review and Preliminary Review** (SOP No. HW-6, Revision No. 8, January, 1992), where applicable. This validation pertains to the following samples collected by Earth Tech personnel on October 9, 10, 11, and 12, 2000:

TP0001 24 (3.5')	**TP0003 24 (3.5')**
MW0824	**MW081214**
TP000468	**TP000546**
MW0712125	**MW09810**
MW091418	**MW07610**

The following items/criteria applicable to the samples listed above were reviewed:

- Deliverable Requirements
- Case Narrative
- Holding Times and Sample Preparation
- GC/MS Instrument Performance Check
- Initial and Continuing Calibration Data
- Method and Field Blank Summary and Data
- Surrogate Recoveries
- Matrix Spike/Matrix Spike Duplicates
- Laboratory Control Sample
- Internal Standard Areas and Retention Times
- Target Compound Identification/Quantitation
- Quantitation Reports and Mass Spectral Data

The above items were in compliance with the SW-846 Methods, laboratory QC criteria and USEPA QA criteria with the exception of the items discussed in the following text. The data have been reviewed according to the above procedures and qualified as described.

Method 8260 –Volatile Organic Compounds

- The continuing calibration exhibited a percent difference from the initial calibration for chloroethane (-25.5%) over the ± 25 % QC Limit. Per USEPA validation guidelines, all samples results associated with out of compliance continuing calibration data are considered estimated and are flagged "J" or "UJ".

- Instrument blank VBLK01 exhibited a positive result of 6 ug/Kg for the common laboratory contaminant methylene chloride. Per USEPA validation guidelines, all sample results for methylene chloride less than 10 times the associated blank result are considered laboratory derived contamination and are therefore negated.

- MS/MSD analysis of sample MW0712125 exhibited a MSD relative percent difference (%RPD) for trichloroethene (30%) and toluene 21%) outside of their USEPA QC Limits of 24% and 21%, respectively. Per USEPA validation guidelines, no qualification to sample data is made based on out-of-control MS/MSD data alone.

Summary

In summary, based on 35 sample data points, 16 of which were qualified as estimated ("J"), and none qualified as unusable, and since estimated data are fully compliant and usable, the usability of this data package is 100%.

Paul D. Wheeler — 12-18-00

Prepared By
Paul D. Wheeler
Environmental Scientist

Date

C. Brett Mongillo — 12-18-00

Reviewed By
C. Brett Mongillo
Manager Chemistry & Sampling Services

Date

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SAMPLE DATA

SUMMARY PACKAGE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND
ANALYTICAL REQUIREMENT SUMMARY

Customer Sample Code	Laboratory Sample Code	*VOA GC/MS Method	*BNA GC/MS Method	*PCB GC Method	*Pest GC Method	*Metals	*Other CN
TP0001 24 (3.5)	001010AQ-01	X					
TP0003 24 (3.5)	001010AQ-02	X					
MW0824	001011B-01	X					
MW081214	001011B-02	X					
TP000246	001011B-03	X					
TP000468	001011B-04	X					
TP000546	001011B-05	X					
MW07610	001012Y-01	X					
MW0712125	001012Y-02	X					
MW09810	001013AF-01	X					
MW091418	001013AF-02	X					

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOLATILE (VOA)
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
001010AQ-01	SOIL	10/9/00	10/10/00	N/A	10/16/00
001010AQ-02	SOIL	10/9/00	10/10/00	N/A	10/16/00
001011B-01	SOIL	10/10/00	10/11/00	N/A	10/16/00
001011B-02	SOIL	10/10/00	10/11/00	N/A	10/16/00
001011B-03	SOIL	10/10/00	10/11/00	N/A	10/16/00
001011B-04	SOIL	10/10/00	10/11/00	N/A	10/16/00
001011B-05	SOIL	10/10/00	10/11/00	N/A	10/16/00
001012Y-01	SOIL	10/11/00	10/12/00	N/A	10/16/00
001012Y-02	SOIL	10/11/00	10/12/00	N/A	10/16/00
001013AF-01	SOIL	10/12/00	10/13/00	N/A	10/16/00
001013AF-02	SOIL	10/12/00	10/13/00	N/A	10/16/00

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Case Narrative

Client: Earth Tech – Congers/Wilsonart

Case: ETH 0015

SDG: MW0712125

Sample ID	Laboratory Sample ID	Date Received	VTSR	Matrix
TP0001 24 (3.5)	001010AQ-01	10/10/00	16:56	Soil
TP0003 24 (3.5)	001010AQ-02	10/10/00	16:56	Soil
MW0824	001011B-01	10/11/00	11:20	Soil
MW081214	001011B-02	10/11/00	11:20	Soil
TP000246	001011B-03	10/11/00	11:20	Soil
TP000468	001011B-04	10/11/00	11:20	Soil
TP000546	001011B-05	10/11/00	11:20	Soil
MW07610	001012Y-01	10/12/00	10:55	Soil
MW0712125	001012Y-02	10/12/00	10:55	Soil
MW09810	001013AF-01	10/13/00	13:05	Soil
MW091418	001013AF-02	10/13/00	13:05	Soil

Volatile Organics

1) The samples were analyzed using EPA Method 8260.

2) Sample MW0712125 (AES sample number 001012Y-02) was used for the matrix spike and the matrix spike duplicate. The %RPD for Trichloroethene and Toluene were outside required limits. According to the method a matrix spike blank must be analyzed. A matrix spike blank was analyzed and all recoveries were within required limits.

3) The instrument blank VBLK01 analyzed on 10/16/00 had the compound Methylene Chloride present at 6 ug/Kg. According to the protocol, this value is within acceptable limits. Samples associated with this blank that have the compound Methylene Chloride present are flagged with a "B".

4) The column used in Instrument D for analysis was an RTX-502.2, 60 meters long with an internal diameter of 0.32 mm. The trap used for this instrument is a VOCARB 4000 with Carbopack C&B / Carboxen 1000 & 1001.

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"I certify that this data package is in compliance with the terms and conditions of the protocol, both technically and for completeness, to the best of my knowledge, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Laboratory Manager

Date: 11/16/00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW0712125

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: MW0712125
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1879
Level: (low/med) LOW Date Received: 10/12/00
% Moisture: not dec. 13. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	28.	B
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
156-60-5	1,2-Dichloroethene-trans	11.	U
67-66-3	Chloroform	3.	J
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	11.	U
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
156-59-2	1,2-Dichloroethene-cis	11.	U
106-42-3	m,p-Xylenes	11.	U
95-47-6	o-Xylene	11.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. MW07610

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: MW07610
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1878
Level: (low/med) LOW Date Received: 10/12/00
% Moisture: not dec. 28. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14.	U
74-83-9	Bromomethane	14.	U
75-01-4	Vinyl Chloride	14.	U
75-00-3	Chloroethane	14.	U
75-09-2	Methylene Chloride	31.	B
67-64-1	Acetone	14.	U
75-15-0	Carbon Disulfide	14.	U
75-35-4	1,1-Dichloroethene	14.	U
75-34-3	1,1-Dichloroethane	14.	U
156-60-5	1,2-Dichloroethene-trans	14.	U
67-66-3	Chloroform	5.	J
107-06-2	1,2-Dichloroethane	14.	U
78-93-3	2-Butanone	14.	U
71-55-6	1,1,1-Trichloroethane	14.	U
56-23-5	Carbon Tetrachloride	14.	U
75-27-4	Bromodichloromethane	14.	U
78-87-5	1,2-Dichloropropane	14.	U
10061-01-5	cis-1,3-Dichloropropene	14.	U
79-01-6	Trichloroethene	14.	U
124-48-1	Dibromochloromethane	14.	U
79-00-5	1,1,2-Trichloroethane	14.	U
71-43-2	Benzene	14.	U
10061-02-6	trans-1,3-Dichloropropene	14.	U
75-25-2	Bromoform	14.	U
108-10-1	4-Methyl-2-Pentanone	14.	U
591-78-6	2-Hexanone	14.	U
127-18-4	Tetrachloroethene	14.	U
79-34-5	1,1,2,2-Tetrachloroethane	14.	U
108-88-3	Toluene	14.	U
108-90-7	Chlorobenzene	14.	U
100-41-4	Ethylbenzene	14.	U
100-42-5	Styrene	14.	U
156-59-2	1,2-Dichloroethene-cis	14.	U
106-42-3	m,p-Xylenes	14.	U
95-47-6	o-Xylene	14.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW081214

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: MW081214
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1874
Level: (low/med) LOW Date Received: 10/11/00
% Moisture: not dec. 15. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12.	U
74-83-9	Bromomethane	12.	U
75-01-4	Vinyl Chloride	12.	U
75-00-3	Chloroethane	12.	U
75-09-2	Methylene Chloride	17.	B
67-64-1	Acetone	12.	U
75-15-0	Carbon Disulfide	12.	U
75-35-4	1,1-Dichloroethene	12.	U
75-34-3	1,1-Dichloroethane	12.	U
156-60-5	1,2-Dichloroethene-trans	12.	U
67-66-3	Chloroform	12.	U
107-06-2	1,2-Dichloroethane	12.	U
78-93-3	2-Butanone	12.	U
71-55-6	1,1,1-Trichloroethane	12.	U
56-23-5	Carbon Tetrachloride	12.	U
75-27-4	Bromodichloromethane	12.	U
78-87-5	1,2-Dichloropropane	12.	U
10061-01-5	cis-1,3-Dichloropropene	12.	U
79-01-6	Trichloroethene	12.	U
124-48-1	Dibromochloromethane	12.	U
79-00-5	1,1,2-Trichloroethane	12.	U
71-43-2	Benzene	12.	U
10061-02-6	trans-1,3-Dichloropropene	12.	U
75-25-2	Bromoform	12.	U
108-10-1	4-Methyl-2-Pentanone	12.	U
591-78-6	2-Hexanone	12.	U
127-18-4	Tetrachloroethene	12.	U
79-34-5	1,1,2,2-Tetrachloroethane	12.	U
108-88-3	Toluene	12.	U
108-90-7	Chlorobenzene	12.	U
100-41-4	Ethylbenzene	12.	U
100-42-5	Styrene	12.	U
156-59-2	1,2-Dichloroethene-cis	12.	U
106-42-3	m,p-Xylenes	12.	U
95-47-6	o-Xylene	12.	U

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW081214

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: MW081214
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1874
Level: (low/med) LOW Date Received: 10/11/00
% Moisture: not dec. 15. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12.	U
74-83-9	Bromomethane	12.	U
75-01-4	Vinyl Chloride	12.	U
75-00-3	Chloroethane	12.	UJ
75-09-2	Methylene Chloride	17.	BU
67-64-1	Acetone	12.	U
75-15-0	Carbon Disulfide	12.	U
75-35-4	1,1-Dichloroethene	12.	U
75-34-3	1,1-Dichloroethane	12.	U
156-60-5	1,2-Dichloroethene-trans	12.	U
67-66-3	Chloroform	12.	U
107-06-2	1,2-Dichloroethane	12.	U
78-93-3	2-Butanone	12.	U
71-55-6	1,1,1-Trichloroethane	12.	U
56-23-5	Carbon Tetrachloride	12.	U
75-27-4	Bromodichloromethane	12.	U
78-87-5	1,2-Dichloropropane	12.	U
10061-01-5	cis-1,3-Dichloropropene	12.	U
79-01-6	Trichloroethene	12.	U
124-48-1	Dibromochloromethane	12.	U
79-00-5	1,1,2-Trichloroethane	12.	U
71-43-2	Benzene	12.	U
10061-02-6	trans-1,3-Dichloropropene	12.	U
75-25-2	Bromoform	12.	U
108-10-1	4-Methyl-2-Pentanone	12.	U
591-78-6	2-Hexanone	12.	U
127-18-4	Tetrachloroethene	12.	U
79-34-5	1,1,2,2-Tetrachloroethane	12.	U
108-88-3	Toluene	12.	U
108-90-7	Chlorobenzene	12.	U
100-41-4	Ethylbenzene	12.	U
100-42-5	Styrene	12.	U
156-59-2	1,2-Dichloroethene-cis	12.	U
106-42-3	m,p-Xylenes	12.	U
95-47-6	o-Xylene	12.	U

pw 12/14/00

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW0824

ab Name: AES, Inc. Contract:
ab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
atrix: (soil/water) SOIL Lab Sample ID: MW0824
ample wt/vol: 5.000 (g/mL) G Lab File ID: D1873
evel: (low/med) LOW Date Received: 10/11/00
Moisture: not dec. 7. Date Analyzed: 10/16/00
C Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
oil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U J
75-09-2	Methylene Chloride	3.	BJV
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
156-60-5	1,2-Dichloroethene-trans	11.	U
67-66-3	Chloroform	1.	J
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	11.	U
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
156-59-2	1,2-Dichloroethene-cis	11.	U
106-42-3	m,p-Xylenes	11.	U
95-47-6	o-Xylene	11.	U

PW 12/14/

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW091418

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: MW091418
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1886
Level: (low/med) LOW Date Received: 10/13/00
% Moisture: not dec. 9. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	UJ
75-09-2	Methylene Chloride	25.	BU
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
156-60-5	1,2-Dichloroethene-trans	11.	U
67-66-3	Chloroform	3.	J
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	11.	U
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
156-59-2	1,2-Dichloroethene-cis	11.	U
106-42-3	m,p-Xylenes	11.	U
95-47-6	o-Xylene	11.	U

PW 12/14/00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW09810

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: MW09810
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1885
Level: (low/med) LOW Date Received: 10/13/00
% Moisture: not dec. 22. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13.	U
74-83-9	Bromomethane	13.	U
75-01-4	Vinyl Chloride	13.	U
75-00-3	Chloroethane	13.	U J
75-09-2	Methylene Chloride	29.	B U
67-64-1	Acetone	13.	U
75-15-0	Carbon Disulfide	13.	U
75-35-4	1,1-Dichloroethene	13.	U
75-34-3	1,1-Dichloroethane	13.	U
156-60-5	1,2-Dichloroethene-trans	13.	U
67-66-3	Chloroform	4.	J
107-06-2	1,2-Dichloroethane	13.	U
78-93-3	2-Butanone	13.	U
71-55-6	1,1,1-Trichloroethane	13.	U
56-23-5	Carbon Tetrachloride	13.	U
75-27-4	Bromodichloromethane	13.	U
78-87-5	1,2-Dichloropropane	13.	U
10061-01-5	cis-1,3-Dichloropropene	13.	U
79-01-6	Trichloroethene	13.	U
124-48-1	Dibromochloromethane	13.	U
79-00-5	1,1,2-Trichloroethane	13.	U
71-43-2	Benzene	13.	U
10061-02-6	trans-1,3-Dichloropropene	13.	U
75-25-2	Bromoform	13.	U
108-10-1	4-Methyl-2-Pentanone	13.	U
591-78-6	2-Hexanone	13.	U
127-18-4	Tetrachloroethene	13.	U
79-34-5	1,1,2,2-Tetrachloroethane	13.	U
108-88-3	Toluene	13.	U
108-90-7	Chlorobenzene	13.	U
100-41-4	Ethylbenzene	13.	U
100-42-5	Styrene	13.	U
156-59-2	1,2-Dichloroethene-cis	13.	U
106-42-3	m,p-Xylenes	13.	U
95-47-6	o-Xylene	13.	U

PW 12/14/00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TP0001

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: TP0001 24(3.5)
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1871
Level: (low/med) LOW Date Received: 10/10/00
% Moisture: not dec. 6. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U J
75-09-2	Methylene Chloride	11.	U
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
156-60-5	1,2-Dichloroethene-trans	11.	U
67-66-3	Chloroform	11.	U
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	11.	U
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
156-59-2	1,2-Dichloroethene-cis	11.	U
106-42-3	m,p-Xylenes	11.	U
95-47-6	o-Xylene	11.	U

PW 12/14/00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TP0003

ab Name: AES, Inc. Contract:
ab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
atrix: (soil/water) SOIL Lab Sample ID: TP0003 24(3.5)
ample wt/vol: 5.000 (g/mL) G Lab File ID: D1872
evel: (low/med) LOW Date Received: 10/10/00
Moisture: not dec. 7. Date Analyzed: 10/16/00
C Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
oil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U J
75-09-2	Methylene Chloride	11.	U
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
156-60-5	1,2-Dichloroethene-trans	11.	U
67-66-3	Chloroform	11.	U
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	11.	U
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
156-59-2	1,2-Dichloroethene-cis	11.	U
106-42-3	m,p-Xylenes	11.	U
95-47-6	o-Xylene	11.	U

PW 12/14/00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TP000468

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: TP000468
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1876
Level: (low/med) LOW Date Received: 10/11/00
% Moisture: not dec. 10. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U J
75-09-2	Methylene Chloride	15.	B U
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
156-60-5	1,2-Dichloroethene-trans	11.	U
67-66-3	Chloroform	11.	U
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	11.	U
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
156-59-2	1,2-Dichloroethene-cis	11.	U
106-42-3	m,p-Xylenes	11.	U
95-47-6	o-Xylene	11.	U

PW 12/14/00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TP000546

ab Name: AES, Inc. Contract:
ab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
atrix: (soil/water) SOIL Lab Sample ID: TP000546
ample wt/vol: 5.000 (g/mL) G Lab File ID: D1877
evel: (low/med) LOW Date Received: 10/11/00
Moisture: not dec. 11. Date Analyzed: 10/16/00
C Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
oil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U J
75-09-2	Methylene Chloride	30.	BU
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
156-60-5	1,2-Dichloroethene-trans	11.	U
67-66-3	Chloroform	4.	J
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	11.	U
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
156-59-2	1,2-Dichloroethene-cis	11.	U
106-42-3	m,p-Xylenes	11.	U
95-47-6	o-Xylene	11.	U

PJ 12/14/00

Wilsonart

Adirondack Labs - SW-846-8260 VOA

SDG # MW0712125

Samples: TP0001 24(3.5), TP0003 24(3.5), MW0824, MW0812,
TP 000246, TP 000468, TP 000546, MW0712125,
MW 09810, MW 091418, MW07610

Holding times: collected 10/9, 10/10, 10/11, 10/12/00
recieved 10/10, 10/11, 10/12, 10/13/00
extracted
analyzed 10/16/00

- 14 days Holding time - (ok)

Case narrative - Sample TP000246 - not analyzed (ok)

System monitoring Cmpd recovery (ok)

→ sample MW0712125

ms/msD - ms (ok)

msD Trichloroethene RPD 30 - QC limit 24
Toluene RPD 21 - QC limit 21

msB - ok

Method Blank - All samples - Methylene chloride 6 µg/kg
sample conc must be ≥10x Blank result otherwise negated.

Internal stds. ok

WILSDNART

Adirondack Environmental Services, Inc.
Experience is the solution
314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

Earth Tech, Inc.
12 Metro Park Road
Albany, New York 12205

Attention: Mark Williams

07 17

Adirondack Environmental Services, Inc.
Experience is the solution
314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

TITLE PAGE

On October 10, 2000 two soil samples were received by Adirondack Environmental Services, Inc. from Earth Tech at the Congers-Wilsonart site. On October 11, 2000 five soil samples were received by Adirondack Environmental Services, Inc. from Earth Tech at the Congers-Wilsonart site. On October 12, 2000 two soil samples were received by Adirondack Environmental Services, Inc. from Earth Tech at the Congers-Wilsonart site. On October 13, 2000 two soil samples were received by Adirondack Environmental Services, Inc. from Earth Tech at the Congers-Wilsonart site. These samples were analyzed for Volatile Organics in accordance with methodology as detailed by the contract. The project was completed on November 16, 2000.

Laura D...

Laboratory Manager

Date: 11/16/00

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW0712125

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: MW0712125
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1879
Level: (low/med) LOW Date Received: 10/12/00
% Moisture: not dec. 13. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	UJ
75-09-2	Methylene Chloride	28.	U
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
156-60-5	1,2-Dichloroethene-trans	11.	U
67-66-3	Chloroform	3.	J
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	11.	U
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
156-59-2	1,2-Dichloroethene-cis	11.	U
106-42-3	m,p-Xylenes	11.	U
95-47-6	o-Xylene	11.	U

pw 11/14/00

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW07610

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: MW07610
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1878
Level: (low/med) LOW Date Received: 10/12/00
% Moisture: not dec. 28. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14.	U
74-83-9	Bromomethane	14.	U
75-01-4	Vinyl Chloride	14.	U
75-00-3	Chloroethane	14.	U
75-09-2	Methylene Chloride	31.	~~B~~ U
67-64-1	Acetone	14.	U
75-15-0	Carbon Disulfide	14.	U
75-35-4	1,1-Dichloroethene	14.	U
75-34-3	1,1-Dichloroethane	14.	U
156-60-5	1,2-Dichloroethene-trans	14.	U
67-66-3	Chloroform	5.	J
107-06-2	1,2-Dichloroethane	14.	U
78-93-3	2-Butanone	14.	U
71-55-6	1,1,1-Trichloroethane	14.	U
56-23-5	Carbon Tetrachloride	14.	U
75-27-4	Bromodichloromethane	14.	U
78-87-5	1,2-Dichloropropane	14.	U
10061-01-5	cis-1,3-Dichloropropene	14.	U
79-01-6	Trichloroethene	14.	U
124-48-1	Dibromochloromethane	14.	U
79-00-5	1,1,2-Trichloroethane	14.	U
71-43-2	Benzene	14.	U
10061-02-6	trans-1,3-Dichloropropene	14.	U
75-25-2	Bromoform	14.	U
108-10-1	4-Methyl-2-Pentanone	14.	U
591-78-6	2-Hexanone	14.	U
127-18-4	Tetrachloroethene	14.	U
79-34-5	1,1,2,2-Tetrachloroethane	14.	U
108-88-3	Toluene	14.	U
108-90-7	Chlorobenzene	14.	U
100-41-4	Ethylbenzene	14.	U
100-42-5	Styrene	14.	U
156-59-2	1,2-Dichloroethene-cis	14.	U
106-42-3	m,p-Xylenes	14.	U
95-47-6	o-Xylene	14.	U

PW 12/14/00

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW0824

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: MW0824
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1873
Level: (low/med) LOW Date Received: 10/11/00
% Moisture: not dec. 7. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	3.	BJ
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
156-60-5	1,2-Dichloroethene-trans	11.	U
67-66-3	Chloroform	1.	J
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	11.	U
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
156-59-2	1,2-Dichloroethene-cis	11.	U
106-42-3	m,p-Xylenes	11.	U
95-47-6	o-Xylene	11.	U

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW091418

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: MW091418
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1886
Level: (low/med) LOW Date Received: 10/13/00
% Moisture: not dec. 9. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	25.	B
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
156-60-5	1,2-Dichloroethene-trans	11.	U
67-66-3	Chloroform	3.	J
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	11.	U
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
156-59-2	1,2-Dichloroethene-cis	11.	U
106-42-3	m,p-Xylenes	11.	U
95-47-6	o-Xylene	11.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW09810

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: MW09810
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1885
Level: (low/med) LOW Date Received: 10/13/00
% Moisture: not dec. 22. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13.	U
74-83-9	Bromomethane	13.	U
75-01-4	Vinyl Chloride	13.	U
75-00-3	Chloroethane	13.	U
75-09-2	Methylene Chloride	29.	B
67-64-1	Acetone	13.	U
75-15-0	Carbon Disulfide	13.	U
75-35-4	1,1-Dichloroethene	13.	U
75-34-3	1,1-Dichloroethane	13.	U
156-60-5	1,2-Dichloroethene-trans	13.	U
67-66-3	Chloroform	4.	J
107-06-2	1,2-Dichloroethane	13.	U
78-93-3	2-Butanone	13.	U
71-55-6	1,1,1-Trichloroethane	13.	U
56-23-5	Carbon Tetrachloride	13.	U
75-27-4	Bromodichloromethane	13.	U
78-87-5	1,2-Dichloropropane	13.	U
10061-01-5	cis-1,3-Dichloropropene	13.	U
79-01-6	Trichloroethene	13.	U
124-48-1	Dibromochloromethane	13.	U
79-00-5	1,1,2-Trichloroethane	13.	U
71-43-2	Benzene	13.	U
10061-02-6	trans-1,3-Dichloropropene	13.	U
75-25-2	Bromoform	13.	U
108-10-1	4-Methyl-2-Pentanone	13.	U
591-78-6	2-Hexanone	13.	U
127-18-4	Tetrachloroethene	13.	U
79-34-5	1,1,2,2-Tetrachloroethane	13.	U
108-88-3	Toluene	13.	U
108-90-7	Chlorobenzene	13.	U
100-41-4	Ethylbenzene	13.	U
100-42-5	Styrene	13.	U
156-59-2	1,2-Dichloroethene-cis	13.	U
106-42-3	m,p-Xylenes	13.	U
95-47-6	o-Xylene	13.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TP0001

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: TP0001 24(3.5)
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1871
Level: (low/med) LOW Date Received: 10/10/00
% Moisture: not dec. 6. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	11.	U
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
156-60-5	1,2-Dichloroethene-trans	11.	U
67-66-3	Chloroform	11.	U
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	11.	U
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
156-59-2	1,2-Dichloroethene-cis	11.	U
106-42-3	m,p-Xylenes	11.	U
95-47-6	o-Xylene	11.	U

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

TP0003

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: TP0003 24(3.5)
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1872
Level: (low/med) LOW Date Received: 10/10/00
% Moisture: not dec. 7. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	11.	U
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
156-60-5	1,2-Dichloroethene-trans	11.	U
67-66-3	Chloroform	11.	U
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	11.	U
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
156-59-2	1,2-Dichloroethene-cis	11.	U
106-42-3	m,p-Xylenes	11.	U
95-47-6	o-Xylene	11.	U

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

TP000468

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: TP000468
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1876
Level: (low/med) LOW Date Received: 10/11/00
% Moisture: not dec. 10. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	15.	B
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
156-60-5	1,2-Dichloroethene-trans	11.	U
67-66-3	Chloroform	11.	U
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	11.	U
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
156-59-2	1,2-Dichloroethene-cis	11.	U
106-42-3	m,p-Xylenes	11.	U
95-47-6	o-Xylene	11.	U

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

TP000546

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: TP000546
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1877
Level: (low/med) LOW Date Received: 10/11/00
% Moisture: not dec. 11. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	30.	B
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
156-60-5	1,2-Dichloroethene-trans	11.	U
67-66-3	Chloroform	4.	J
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	11.	U
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
156-59-2	1,2-Dichloroethene-cis	11.	U
106-42-3	m,p-Xylenes	11.	U
95-47-6	o-Xylene	11.	U

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712

Level:(low/med) LOW

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
1	VBLK01	105	108	88		0
2	TP0001 24(3.5)	93	96	82		0
3	TP0003 24(3.5)	95	102	86		0
4	MW0824	100	100	96		0
5	MW081214	100	102	82		0
6	TP000468	102	104	91		0
7	TP000546	93	98	89		0
8	MW07610	94	94	93		0
9	MW0712125	91	96	96		0
10	MW0712125 MS	93	93	85		0
11	MW0712125 MSD	97	104	89		0
12	SMSB	96	95	92		0
13	MW09810	98	95	93		0
14	MW091418	102	104	98		0
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27						
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30						

	QC LIMITS
SMC1 (TOL) = Toluene d-8	(84-138)
SMC2 (BFB) = Bromofluorobenzene	(59-113)
SMC3 (DCE) = 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712

Matrix Spike - EPA Sample No.: MW0712125 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	57.	0.	60.	104	59-172
Trichloroethene	57.	0.	68.	118	62-137
Benzene	57.	0.	72.	125	66-142
Toluene	57.	0.	69.	120	59-139
Chlorobenzene	57.	0.	66.	115	60-133

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	57.	52.	90	14	22	59-172
Trichloroethene	57.	50.	87	30 *	24	62-137
Benzene	57.	59.	103	19	21	66-142
Toluene	57.	56.	97	21 *	21	59-139
Chlorobenzene	57.	56.	97	17	21	60-133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 2 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS:

3C

SOIL VOLATILE MATRIX SPIKE BLANK RECOVERY

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712125

Matrix Spike - EPA Sample No.: Blank Level:(Low/Med) Low

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONC. ug/kg	MS CONC. ug/kg	MS % REC. #	QC LIMITS REC.
1,1-Dichloroethene	50	0	52	104	61-145
Trichloroethene	50	0	60	119	71-120
Benzene	50	0	62	123	76-127
Toluene	50	0	62	124	76-125
Chlorobenzene	50	0	61	122	75-130

Column used to flag recovery values

* Values outside of required QC limits

Spike Recovery 0 out of 5 outside limits

Comments: _____

4A

EPA SAMPLE NO.

VOLATILE METHOD BLANK SUMMARY

VBLK01

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712

Lab File ID: DB157 Lab Sample ID: VBLK

Date Analyzed: 10/16/00 Time Analyzed: 12:11

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) Y

Instrument ID: H5970 D

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	TP0001 24(3.5)	TP0001 24(3.5)	D1871	12:40
2	TP0003 24(3.5)	TP0003 24(3.5)	D1872	13:10
3	MW0824	MW0824	D1873	13:39
4	MW081214	MW081214	D1874	14:09
5	TP000468	TP000468	D1876	15:08
6	TP000546	TP000546	D1877	15:37
7	MW07610	MW07610	D1878	16:07
8	MW0712125	MW0712125	D1879	16:36
9	MW0712125 MS	MW0712125 MS	D1880	17:06
10	MW0712125 MSD	MW0712125 MSD	D1881	17:35
11	SMSB	SMSB	D1882	18:05
12	MW09810	MW09810	D1885	19:33
13	MW091418	MW091418	D1886	20:03
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COMMENTS:

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

VBLK01

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: VBLK
Sample wt/vol: 5.000 (g/mL) G Lab File ID: DB157
Level: (low/med) LOW Date Received:
% Moisture: not dec. 0. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	6.	J
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	1,2-Dichloroethene-trans	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon Tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	U
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
10061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
156-59-2	1,2-Dichloroethene-cis	10.	U
106-42-3	m,p-Xylenes	10.	U
95-47-6	o-Xylene	10.	U

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Lab File ID (Standard): DS157 Date Analyzed: 10/16/00
Instrument ID: H5970 D Time Analyzed: 11:41
GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) Y

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	15424.	10.18	91756.	11.60	81984.	17.32
	UPPER LIMIT	30848.	10.68	183512.	12.10	163968.	17.82
	LOWER LIMIT	7712.	9.68	45878.	11.10	40992.	16.82
	EPA SAMPLE NO.						
1	VBLK01	14983.	10.18	82211.	11.64	76952.	17.32
2	TP0001 24(3.5)	13711.	10.18	74464.	11.64	68643.	17.32
3	TP0003 24(3.5)	11964.	10.18	61198.	11.64	56888.	17.32
4	MW0824	12663.	10.15	69003.	11.62	64909.	17.29
5	MW081214	14544.	10.16	80294.	11.62	73522.	17.29
6	TP000468	14505.	10.18	74390.	11.60	70829.	17.32
7	TP000546	12568.	10.18	67852.	11.60	65034.	17.32
8	MW07610	11826.	10.18	71638.	11.60	65603.	17.32
9	MW0712125	11961.	10.18	74310.	11.64	70079.	17.32
10	MW0712125 MS	12110.	10.14	66257.	11.60	62509.	17.32
11	MW0712125 MSD	11630.	10.18	68454.	11.64	63758.	17.32
12	SMSB	13148.	10.18	76002.	11.60	70195.	17.32
13	MW09810	11198.	10.13	66177.	11.64	59330.	17.32
14	MW091418	11272.	10.16	68113.	11.62	64073.	17.29
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

SAMPLE DATA

PACKAGE

Adirondack Environmental Services, Inc.
Experience is the solution
314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

Case Narrative

Client: Earth Tech – Congers/Wilsonart

Case: ETH 0015

SDG: MW0712125

Sample ID	Laboratory Sample ID	Date Received	VTSR	Matrix
TP0001 24 (3.5)	001010AQ-01	10/10/00	16:56	Soil
TP0003 24 (3.5)	001010AQ-02	10/10/00	16:56	Soil
MW0824	001011B-01	10/11/00	11:20	Soil
MW081214	001011B-02	10/11/00	11:20	Soil
TP000246	001011B-03	10/11/00	11:20	Soil
TP000468	001011B-04	10/11/00	11:20	Soil
TP000546	001011B-05	10/11/00	11:20	Soil
MW07610	001012Y-01	10/12/00	10:55	Soil
MW0712125	001012Y-02	10/12/00	10:55	Soil
MW09810	001013AF-01	10/13/00	13:05	Soil
MW091418	001013AF-02	10/13/00	13:05	Soil

Volatile Organics

1) The samples were analyzed using EPA Method 8260.

2) Sample MW0712125 (AES sample number 001012Y-02) was used for the matrix spike and the matrix spike duplicate. The %RPD for Trichloroethene and Toluene were outside required limits. According to the method a matrix spike blank must be analyzed. A matrix spike blank was analyzed and all recoveries were within required limits.

3) The instrument blank VBLK01 analyzed on 10/16/00 had the compound Methylene Chloride present at 6 ug/Kg. According to the protocol, this value is within acceptable limits. Samples associated with this blank that have the compound Methylene Chloride present are flagged with a "B".

4) The column used in Instrument D for analysis was an RTX-502.2, 60 meters long with an internal diameter of 0.32 mm. The trap used for this instrument is a VOCARB 4000 with Carbopack C&B / Carboxen 1000 & 1001.

Adirondack Environmental Services, Inc.
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314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

"I certify that this data package is in compliance with the terms and conditions of the protocol, both technically and for completeness, to the best of my knowledge, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Laura Dorl

Laboratory Manager

Date: 11/16/00

Chain of Custody Record

ARTH TECH
A tyco INTERNATIONAL LTD COMPANY

Custody Seal # | Rust E&I Cooler #

Project Number | Project Name/Client: CONGERS / WILSONART

Sample Custodian: (Signature) Mark A. Williams

Item No.	Sample Description (Field ID Number)	Date (2000)	Time	Grab	Comp.	PID Reading (ppm)	Label Number	Analysis Required: VOCs (EPA SW-846 Method 8260) + TICs	Analysis Required: Freons	Matrix: Sample Type: SOIL	Matrix: Sample Container: 1 4oz. glass
1	TP0001 24 (3.5')	10.9	1538	X		3.6		X	X	X	X
2	TP0003 24 (3.5')	10.9	1625	X		6.3		X	X	X	X
3											
4											
5											
6											
7	PLEASE LOOK FOR FREON COMPOUNDS IN TIC LIST AND										
8	PROVIDE ESTIMATED CONCENTRATIONS BASED ON LIBRARY STANDARD										
9	ANALYSES										
10											
11											
12											
13											
14											
15											
16											
17											
18											

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Disposed of by: (Signature)	Items:	Date / Time
Mark A. Williams	10.9.0 0730 (10/10/00)	C. Burt Moggill			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Disposed of by: (Signature)	Items:	Date / Time
		M. [illegible] 10/10/00 → 456 PM			

2nd Lab Results To:
MARK WILLIAMS
12 Metro Park Road
Albany, N.Y. 12205
(518) 437.8368

Remarks: ASP CATEGORY B DELIVERABLES REQUESTED –
Federal Express Airbill No.:
Lab:

Check Delivery Method:
☒ Samples delivered in person
☐ Common carrier

Laboratory Receiving Notes:
Custody Seal Intact?
Temp. of Shipping Container:
Sample Condition:

v. 10/98 | White Copy - Lab | Yellow Copy - File | Pink Copy - Client | 1514/Arth.Sct

Chain of Custody Record

EARTH TECH

A tyco INTERNATIONAL LTD COMPANY

★ please hold analysis for this sample... will call in morning

MAW

Custody Seal #	Rust E&I Cooler #

Project Number	Project Name/Client	Analysis Required	Matrix
	Congers / Wilsonart International	EPA 8260; FREONS	Sample Type: SOIL; Sample Container: 1 4oz. glass

Sample Custodian: (Signature) Mark A. Williams

DVL No.	Sample Description (Field ID Number)	2000 Date	Time	Grab	Comp.	PID Reading (ppm)	Label Number
1	MW0824	10.10	0802	X			
2	MW081214		0925	X			
3	TP000246 ★ ①		1214	X		3.2	
4	TP000468 ②		1412	X		5.5	
5	TP000546 ③		1538	X		5.8	
6							
7							
8							
9	Bottles read						
10	① TP002 4-6'						
11	② TP004 6-8'						
12	③ TP005 4-6'						
13	(4)						
14							
15							
16							
17							
18							

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Disposed of by: (Signature)	Items:	Date / Time
Mark A. Williams	10.10.00 1825				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Disposed of by: (Signature)	Items:	Date / Time
		10/11/00 11:20			

Send Lab Results To:
MARK WILLIAMS
EARTH TECH, INC.
12 Metro Park Road
Albany, N.Y. 12205

Remarks: CATEGORY B. DELIVERABLES REQUIRED
Federal Express Airbill No.: 821299813827
Lab: ADIRONDACK ENVIRONMENTAL SERVICES

Check Delivery Method:
☐ Samples delivered in person
☒ Common carrier
Fed Ex

Laboratory Receiving Notes:
Custody Seal Intact? N/A
Temp. of Shipping Container: 6°C
Sample Condition: OK

v. 10/98 White Copy - Lab Yellow Cr Pink Copy - Client arth.Sci

ARTH TECH

A tyco INTERNATIONAL LTD. COMPANY

Chain of Custody Record

Custody Seal # | Rust E&I Cooler #

Project Number: [redacted] | Project Name/Client: [redacted] N.Y. / WILSONART

Sample Custodian: (Signature) Mark A. Williams

Item No.	Sample Description (Field ID Number)	Date	Time	Grab	Comp.	PID Reading (ppm)	Label Number	Analysis Required: EPA 8260	Matrix: Sample Type: Soil	Matrix: Sample Container: 2041
1	MW07610	10.11.2000	1300	X		[redacted]		X 8260-401	X	X
2	MW0712125		1325	X		9.3		X 402	X	X
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Disposed of by: (Signature)	Items:	Date / Time
Mark A. Williams	10.11.00 20:00	[signature]			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Disposed of by: (Signature)	Items:	Date / Time
[signature] 10:55 10/12	10/12/00 10:55	[signature]			

Send Lab Results To:
MARK WILLIAMS
12 Metro Park Road
Albany, N.Y. 12205

Remarks: CATEGORY B DELIVERABLES
* REQUIRED
Federal Express Airbill No.:
Lab:

Check Delivery Method:
☒ Samples delivered in person
☐ Common carrier

Laboratory Receiving Notes:
Custody Seal Intact?
Temp. of Shipping Container:
Sample Condition:

Rev. 10/98

White Copy - Lab | Yellow Copy - File | Pink Copy - Client

I:\514\Earth.Sct

Chain of Custody Record

EARTH TECH
A Tyco International Ltd. Company

Project Number	Project Name/Client	Custody Seal #	Rust E&I Cooler #
	WILSONART – Congers, N.Y.		

Sample Custodian: (Signature) Mark A. Williams

Item No.	Sample Description (Field ID Number)	Date	Time	Grab	Comp.	PID Reading (ppm)	Label Number	Analysis Required: EPA 8260	Matrix: Sample Type: Soil	Matrix: Sample Container: 1 4oz. glass
1	MW09810	10/2/2000	1110	X		7.7		X	X	X
2	MW09141418	↓	1215	X		9.6/8.1		X	X	X
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										

Analysis Required: OV1013AFO1 AFO2

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Disposed of by: (Signature)	Items:	Date / Time
Mark A. Williams	10.13.00 1:05				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Disposed of by: (Signature)	Items:	Date / Time

Send Lab Results To: MARK WILLIAMS
EARTH TECH INC.
12 Metro Park Road
Albany N.Y. 12205
(518) 437.8368

Remarks: CATEGORY B DELIVERABLES REQUIRED

Federal Express Airbill No.:

Lab: AES

Check Delivery Method:
- [x] Samples delivered in person
- [ ] Common carrier

Laboratory Receiving Notes:
Custody Seal Intact?
Temp. of Shipping Container:
Sample Condition:

10/98 White Copy - Lab Yellow Copy Pink Copy - Client EarthSol

Adirondack Environmental Services
Internal Chain of Custody
AES Project # 001010AQ

Sample # **001010AQ01** Client Sample ID **TP0001** 24 (3.5') # Bottles: 1

Bottle	Out Relinquished	Received	Date/Time	Back Relinquished	Received	Date/Time	Analysis
1	M-L	P. Lazaro	10-19-00 9:00	P. Lazaro	M-L	10-19-00 17:00	TS
1	M-L	[illegible]	10/11 8:00	[illegible]	M-L	10/18 17:00	VOA

Sample # **001010AQ02** Client Sample ID **TP0003** 24 (3.5') # Bottles: 1

Bottle	Out Relinquished	Received	Date/Time	Back Relinquished	Received	Date/Time	Analysis
1	M-L	P. Lazaro	10-19-00 9:00	P. Lazaro	M-L	10-19-00 17:00	TS
1	M-L	[illegible]	10/11 8:00	[illegible]	M-L	10/18 17:00	VOA

***** End Chain of Custody Form *****

Adirondack Environmental Services
Internal Chain of Custody
AES Project # 001011 B

Sample # 001011 B01 Client Sample ID **MW0824** # Bottles: 1

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	M.L	P. Lagano	10-19-00 9⁰⁰	P. Lagano	M.L	10-19-00 17⁰⁰	TS/pH
1	M.L	M. Lemmell	10/11 13⁰⁰	M. Lemmell	M.L (MW)	10/18 17⁰⁰	VOA

Sample # 001011 B02 Client Sample ID **MW081214** # Bottles: 1

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	M.L	P. Lagano	10-19-00 9⁰⁰	P. Lagano	M.L	10-19-00 17⁰⁰	TS/pH
1	M.L	M. Lemmell	10/11 13⁰⁰	M. Lemmell	M.L (MW)	10/18 17⁰⁰	VOA

Sample # 001011 B03 Client Sample ID **TP000246** # Bottles: 1

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	M.L	MS/C					
1	M.L	M. Lemmell	10/11 13⁰⁰	M. Lemmell	M.L	10/18 17⁰⁰	VOA

Sample # 001011 B04 Client Sample ID **TP000468** # Bottles: 1

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	M.L	P. Lagano	10-19-00 9⁰⁰	P. Lagano	M.L	10-19-00 17⁰⁰	TS/pH
1	M.L	M. Lemmell	10/11 13⁰⁰	M. Lemmell	M.L	10/18 17⁰⁰	VOA

Sample # 001011 B05 Client Sample ID **TP000546** # Bottles: 1

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	M.L	P. Lagano	10-19-00 9⁰⁰	P. Lagano	M.L	10-19-00 17⁰⁰	TS/pH
1	M.L	M. Lemmell	10/11 13⁰⁰	M. Lemmell	M.L	10-18 17⁰⁰	VOA

***** End Chain of Custody Form *****

Adirondack Environmental Services
Internal Chain of Custody
AES Project # 001012 Y

Sample # 001012 Y01 Client Sample ID MW07610 # Bottles: 1

Bottle	Out Relinquished	Received	Date/Time	Back Relinquished	Received	Date/Time	Analysis
1	M.L	P. Lazzaro	10-19-00 9:00	P. Lazzaro	M.L	10-19-00 17:00	TS/pH
1	M.L	[illegible]	10/12 17:00	[illegible]	M.L	10/18 17:00	VOA

Sample # 001012 Y02 Client Sample ID MW0712125 # Bottles: 1

Bottle	Out Relinquished	Received	Date/Time	Back Relinquished	Received	Date/Time	Analysis
1	M.L	P. Lazzaro	10-19-00 9:00	P. Lazzaro	M.L	10-19-00 17:00	TS/Ph
1	M.L	[illegible]	10/12 17:00	[illegible]	M.L	10/18 17:00	VOA

***** End Chain of Custody Form *****

Adirondack Environmental Services

Internal Chain of Custody

AES Project # 001013AF

Sample # **001013AF01** Client Sample ID **MW09810** # Bottles: 1

Bottle	Out Relinquished	Out Received	Out Date/Time	Back Relinquished	Back Received	Back Date/Time	Analysis
1	M.L	P. Lyzaro	10-19-00 900	P Lyzaro	M.L	10-19-00 1700	Ts/pH
1	M-L		10/13 1700		M.L	10/18 1700	VOA

Sample # **001013AF02** Client Sample ID **MW091418** # Bottles: 1

Bottle	Out Relinquished	Out Received	Out Date/Time	Back Relinquished	Back Received	Back Date/Time	Analysis
1	M-L	P. Lyzaro	10-19-00 900	P. Lyzaro	M.L	10-19-00 1700	Ts/pH
1	M-L		10/13 1700		M.L	10/18 1700	VOA

***** End Chain of Custody Form *****

VOLATILE ORGANICS

ANALYSIS

QC

SUMMARY

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712

Level:(low/med) LOW

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
1	VBLK01	105	108	88		0
2	TP0001 24(3.5)	93	96	82		0
3	TP0003 24(3.5)	95	102	86		0
4	MW0824	100	100	96		0
5	MW081214	100	102	82		0
6	TP000468	102	104	91		0
7	TP000546	93	98	89		0
8	MW07610	94	94	93		0
9	MW0712125	91	96	96		0
10	MW0712125 MS	93	93	85		0
11	MW0712125 MSD	97	104	89		0
12	SMSB	96	95	92		0
13	MW09810	98	95	93		0
14	MW091418	102	104	98		0
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

	QC LIMITS
SMC1 (TOL) = Toluene d-8	(84-138)
SMC2 (BFB) = Bromofluorobenzene	(59-113)
SMC3 (DCE) = 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712

Matrix Spike - EPA Sample No.: MW0712125 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	57.	0.	60.	104	59-172
Trichloroethene	57.	0.	68.	118	62-137
Benzene	57.	0.	72.	125	66-142
Toluene	57.	0.	69.	120	59-139
Chlorobenzene	57.	0.	66.	115	60-133

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC
1,1-Dichloroethene	57.	52.	90	14	22	59-172
Trichloroethene	57.	50.	87	30 *	24	62-137
Benzene	57.	59.	103	19	21	66-142
Toluene	57.	56.	97	21 *	21	59-139
Chlorobenzene	57.	56.	97	17	21	60-133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 2 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS:

3C

SOIL VOLATILE MATRIX SPIKE BLANK RECOVERY

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712125

Matrix Spike - EPA Sample No.: Blank Level:(Low/Med) Low

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONC. ug/kg	MS CONC. ug/kg	MS % REC. #	QC LIMITS REC.
1,1-Dichloroethene	50	0	52	104	61-145
Trichloroethene	50	0	60	119	71-120
Benzene	50	0	62	123	76-127
Toluene	50	0	62	124	76-125
Chlorobenzene	50	0	61	122	75-130

Column used to flag recovery values

* Values outside of required QC limits

Spike Recovery 0 out of 5 outside limits

Comments: _____

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK01

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712

Lab File ID: DB157 Lab Sample ID: VBLK

Date Analyzed: 10/16/00 Time Analyzed: 12:11

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) Y

Instrument ID: H5970 D

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	TP0001 24(3.5)	TP0001 24(3.5)	D1871	12:40
2	TP0003 24(3.5)	TP0003 24(3.5)	D1872	13:10
3	MW0824	MW0824	D1873	13:39
4	MW081214	MW081214	D1874	14:09
5	TP000468	TP000468	D1876	15:08
6	TP000546	TP000546	D1877	15:37
7	MW07610	MW07610	D1878	16:07
8	MW0712125	MW0712125	D1879	16:36
9	MW0712125 MS	MW0712125 MS	D1880	17:06
10	MW0712125 MSD	MW0712125 MSD	D1881	17:35
11	SMSB	SMSB	D1882	18:05
12	MW09810	MW09810	D1885	19:33
13	MW091418	MW091418	D1886	20:03
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712

Lab File ID: DT149 BFB Injection Date: 10/12/00

Instrument ID.: H5970 D BFB Injection Time: 13:50

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	31.9
75	30.0 - 66.0% of mass 95	59.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	.0 (.0)1
174	50.0 - 120.0% of mass 95	58.1
175	4.0 - 9.0 % of mass 174	4.7 (8.1)1
176	93.0 - 101.0% of mass 174	55.5 (95.5)1
177	5.0 - 9.0% of mass 176	3.9 (7.0)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD010	VSTD010	DS149	10/12/00	14:15
2	VSTD020	VSTD020	DS150	10/12/00	14:44
3	VSTD050	VSTD050	DS151	10/12/00	15:14
4	VSTD100	VSTD100	DS152	10/12/00	15:44
5	VSTD200	VSTD200	DS153	10/12/00	16:13
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712

Lab File ID: DT157 BFB Injection Date: 10/16/00

Instrument ID.: H5970 D BFB Injection Time: 11:11

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	28.5
75	30.0 - 66.0% of mass 95	58.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.7
173	Less than 2.0% of mass 174	.0 (.0)1
174	50.0 - 120.0% of mass 95	72.6
175	4.0 - 9.0 % of mass 174	6.5 (9.0)1
176	93.0 - 101.0% of mass 174	69.3 (95.5)1
177	5.0 - 9.0% of mass 176	5.7 (8.2)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD050	VSTD050	DS157	10/16/00	11:41
2	VBLK01	VBLK	DB157	10/16/00	12:11
3	TP0001	TP0001 24(3.5)	D1871	10/16/00	12:40
4	TP0003	TP0003 24(3.5)	D1872	10/16/00	13:10
5	MW0824	MW0824	D1873	10/16/00	13:39
6	MW081214	MW081214	D1874	10/16/00	14:09
7	TP000468	TP000468	D1876	10/16/00	15:08
8	TP000546	TP000546	D1877	10/16/00	15:37
9	MW07610	MW07610	D1878	10/16/00	16:07
10	MW0712125	MW0712125	D1879	10/16/00	16:36
11	MW0712125 MS	MW0712125 MS	D1880	10/16/00	17:06
12	MW0712125 MSD	MW0712125 MSD	D1881	10/16/00	17:35
13	SMSB	SMSB	D1882	10/16/00	18:05
14	MW09810	MW09810	D1885	10/16/00	19:33
15	MW091418	MW091418	D1886	10/16/00	20:03
16					
17					
18					
19					
20					
21					
22					

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Lab File ID (Standard): DS157 Date Analyzed: 10/16/00
Instrument ID: H5970 D Time Analyzed: 11:41
GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) Y

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	15424.	10.18	91756.	11.60	81984.	17.32
	UPPER LIMIT	30848.	10.68	183512.	12.10	163968.	17.82
	LOWER LIMIT	7712.	9.68	45878.	11.10	40992.	16.82
	EPA SAMPLE NO.						
1	VBLK01	14983.	10.18	82211.	11.64	76952.	17.32
2	TP0001 24(3.5)	13711.	10.18	74464.	11.64	68643.	17.32
3	TP0003 24(3.5)	11964.	10.18	61198.	11.64	56888.	17.32
4	MW0824	12663.	10.15	69003.	11.62	64909.	17.29
5	MW081214	14544.	10.16	80294.	11.62	73522.	17.29
6	TP000468	14505.	10.18	74390.	11.60	70829.	17.32
7	TP000546	12568.	10.18	67852.	11.60	65034.	17.32
8	MW07610	11826.	10.18	71638.	11.60	65603.	17.32
9	MW0712125	11961.	10.18	74310.	11.64	70079.	17.32
10	MW0712125 MS	12110.	10.14	66257.	11.60	62509.	17.32
11	MW0712125 MSD	11630.	10.18	68454.	11.64	63758.	17.32
12	SMSB	13148.	10.18	76002.	11.60	70195.	17.32
13	MW09810	11198.	10.13	66177.	11.64	59330.	17.32
14	MW091418	11272.	10.16	68113.	11.62	64073.	17.29
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

Volatile Organics IDL

Date Performed: 10/30/00

Parameter	Conc 1 DIDL1	Conc 2 DIDL2	Conc 3 DIDL3	Conc 4 DIDL4	Conc 5 DIDL5	Conc 6 DIDL6	Conc 7 DIDL7	Conc 8 DIDL8	SD	IDL
Chloromethane	36.53	39.31			35.36		39.70		2.116	9.609
Bromomethane	36.25	37.13	35.28		34.83		40.62	39.54	2.339	7.870
Vinyl Chloride	28.94	32.29	32.62		28.97	30.09	32.18	30.24	1.584	4.978
Chloroethane	28.70	25.53	28.95	29.39		29.31	26.29	25.97	1.717	5.397
Methylene Chloride		32.22	29.47	30.77	28.34		30.99	31.39	1.399	4.707
Acetone	39.86		34.12		34.71	34.81	37.79		2.469	9.252
Trichlorofluoromethane		15.04	17.36	19.97	16.49		17.28	18.76	1.722	5.795
Carbon Disulfide	20.28			21.32	18.34	18.80		18.96	1.229	4.604
1,1-Dichloroethene	17.07		18.36	19.60	17.21	18.19	17.46	16.32	1.070	3.363
1,1-Dichloroethane	19.91			21.56	20.78		21.90	19.34	1.079	4.044
trans-1,2-Dichloroethene	17.36		19.46	19.14	19.51		19.26		0.899	3.369
cis-1,2-Dichloroethene	20.67		23.45	22.12	20.85	20.57	22.27	20.77	1.102	3.463
Chloroform	21.76			21.72	21.18	22.73		19.69	1.115	4.178
1,2 Dichloroethane	17.85	20.77	19.86	18.85	18.62	17.95	19.43	18.23	1.015	3.044
2-Butanone	25.72		25.19		24.65	23.42		20.34	2.147	8.044
1,1,1-Trichloroethane	24.08	21.61	23.90	22.92	23.42	23.25	23.51	24.30	0.844	2.529
Carbon Tetrachloride	22.96	23.26		21.11		22.82	22.47		0.840	3.147
Vinyl Acetate	26.91	27.85	28.42	26.71			28.14	27.18	0.699	2.353
Bromodichloromethane	24.16	22.18	25.01	22.51	24.49	24.40	22.74	24.13	1.061	3.
1,2-Dichloropropane	23.06		23.38		24.57	25.89	26.07	26.23	1.408	4.
cis-1,3-Dichloropropene	23.52	22.24	24.00	22.89	21.82	22.74	22.98	23.95	0.776	2.
Trichloroethene	24.38	21.98	20.48	22.97	22.72	23.87	21.33	23.58	1.328	3.982
Dibromochloromethane	21.46	18.89	22.74	21.68	20.15	21.08	23.32	21.26	1.389	4.163
1,1,2-Trichloroethane	22.59	25.02	26.15	24.43	22.75		24.97		1.395	4.694
Benzene	22.90	23.09	23.74	22.71	22.83	23.41	23.33	24.41	0.562	1.685
trans-1,3-Dichloropropene	23.08	22.89	23.97	23.15	23.22	21.94	22.36	22.37	0.636	1.906
2-Chloroethyl vinyl ether	24.33	23.41	25.78		29.00	28.00	24.86	26.54	2.006	6.304
Bromoform	24.38	26.31	24.63	25.12	25.27	26.33	27.17		1.022	3.213
2-Hexanone		25.14	23.25	27.58	27.92		24.73	24.26	1.871	6.296
4-Methyl-2-pentanone	23.55	24.23	22.75		24.52	22.80	24.37	22.84	0.793	2.493
Tetrachloroethene	22.30	25.71		25.64	23.24	23.33	24.11	24.19	1.261	3.963
1,1,2,2-Tetrachloroethane		22.87	21.13	21.89	21.77	20.75	23.70	23.29	1.112	3.494
Toluene	21.69	22.88	21.37	22.49	22.66	22.00	22.86	22.66	0.569	1.706
Chlorobenzene	22.79	24.30	21.97	22.60	23.17	22.77	23.72	24.17	0.815	2.443
Ethylbenzene	20.73		20.50	21.09	20.86	20.32	19.85	20.80	0.411	1.293
Styrene	22.32	24.52	23.65	23.34	23.53	23.12	23.81	24.24	0.680	2.038
m&p-Xylene	62.71	65.61		61.85	62.49		63.94	64.75	1.453	4.889
o-Xylene	23.76	24.18	24.14	22.93	23.26	21.70	23.70	23.19	0.805	2.413
1,3-Dichlorobenzene	22.64	23.30	23.03	20.80	22.73	21.98	22.24	23.23	0.824	2.471
1,4-Dichlorobenzene	23.11	25.47	22.97	23.60	24.38	21.89	23.64	23.85	1.051	3.150
1,2-Dichlorobenzene	22.49	21.75	21.59	21.20	22.49	21.16	22.33	22.73	0.620	1.858

SAMPLE

DATA

1A

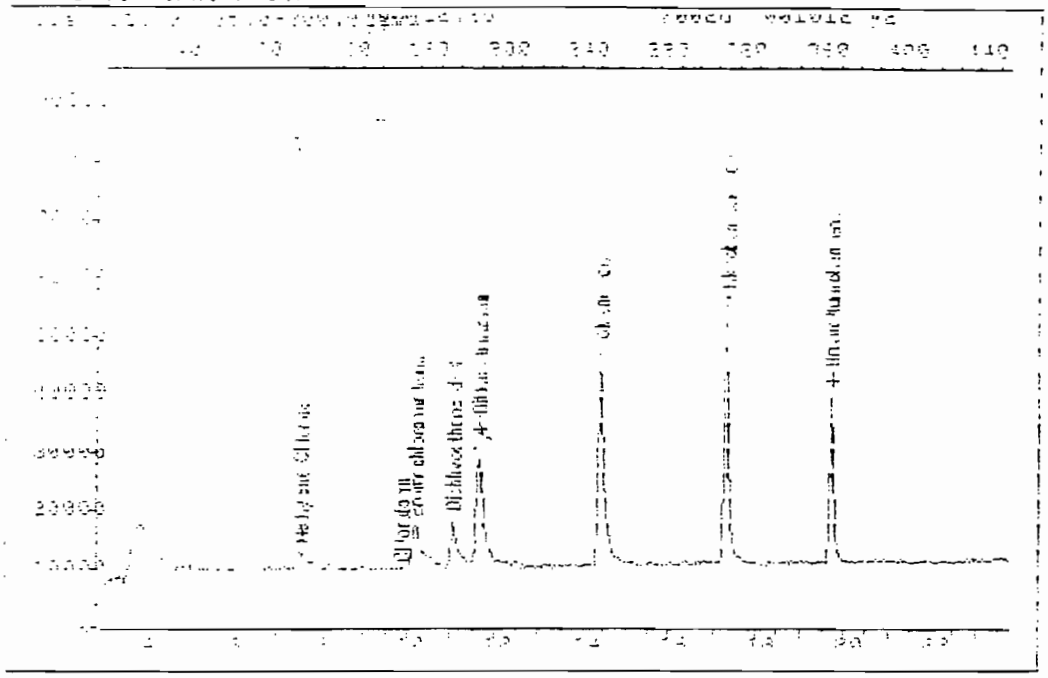
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW0712125

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: MW0712125
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1879
Level: (low/med) LOW Date Received: 10/12/00
% Moisture: not dec. 13. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	28.	B
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
156-60-5	1,2-Dichloroethene-trans	11.	U
67-66-3	Chloroform	3.	J
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	11.	U
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
156-59-2	1,2-Dichloroethene-cis	11.	U
106-42-3	m,p-Xylenes	11.	U
95-47-6	o-Xylene	11.	U



Data File: ^D1879::D6 Quant Output File: ^D1879::QT
Name: mw0712.25 Instrument ID: 7002 D
Misc: 7002d 001012 w2

Id File: IDS891::MT
Title: HP V3A Continuing Calibration Standard
Last Calibration: 000416 12:38 Last Ocal Time: **1016 11:41

Operator ID: MARIE
Start Time : 001017 09:32
Injected at: **1016 16:36

QUANT REPORT Page

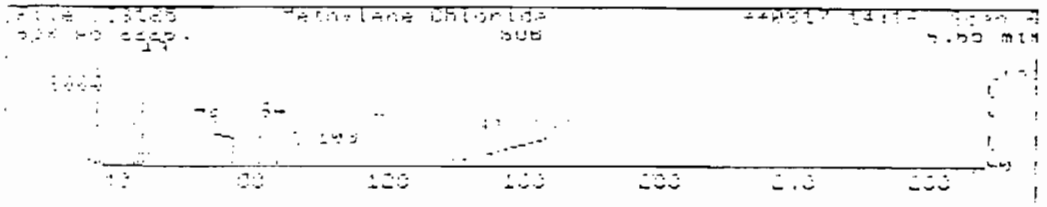
Operator ID: MARIE Quant Pass: 2 Quant Time: 001017 08:32
Output File: 101879::DT Injected at: **1014 16:36
Data File: D1879::D4 Dilution Factor: 1.00000
Amt: ...0712.DB Instrument ID: 7002 D
Misc: 70004 001040 VB

ID File: 10030I::MT
Title: HP 002 Continuing Calibration Standard
Last Calibration: 10'14 10:13 Last Qual Time: **1014 11:41

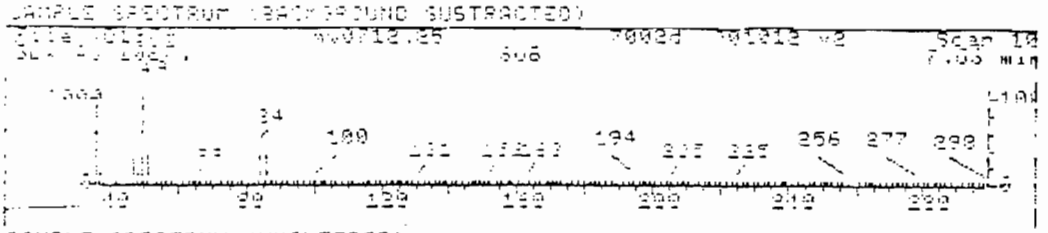
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.18	128.0	11961	50.00	UG	9
6)	Methylene Chloride	7.53	84.0	12229	24.35	UG	5
18)	Chloroform	9.86	83.0	3603	2.90	UG	8
19)	1,2-Dichloroethane-d4	11.05	65.0	43002	48.21	UG	10
22)	*1,4-Difluorobenzene	11.64	114.0	74310	50.00	UG	9
24)	Chlorobenzene-d5	17.32	117.0	70079	50.00	UG	9
42)	Toluene d-8	14.39	98.0	102275	45.67	UG	9
43)	Bromofluorobenzene	19.70	95.0	33135	47.76	UG	9

* Compound is ISTD

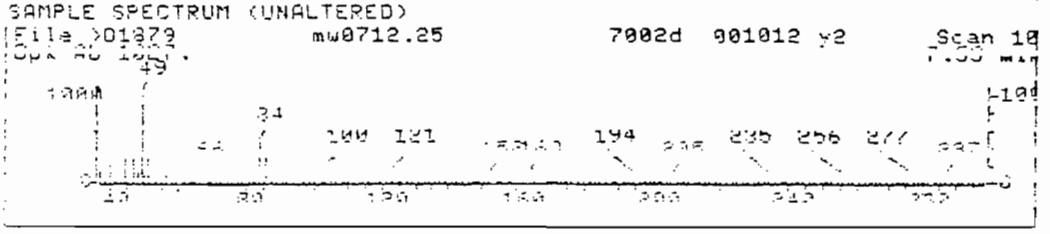
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

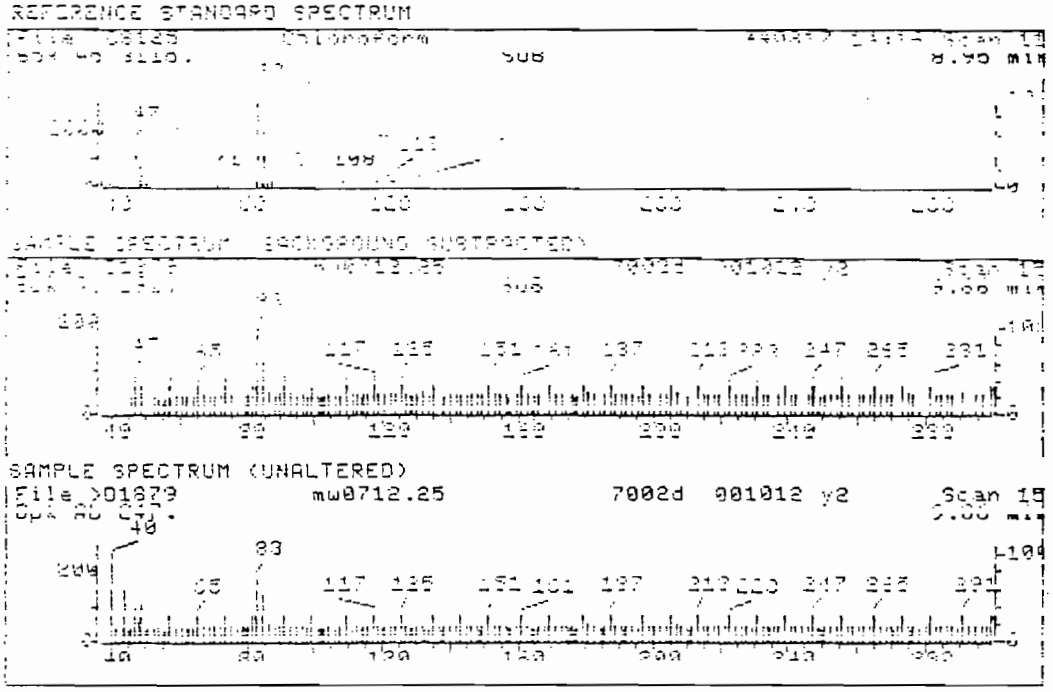


SAMPLE SPECTRUM (UNALTERED)



Data File: ^01879::D6 Quant Output File: ^01879::QT
Name: mw0712.25 Instrument ID: 7002 D
Misc: 7002d 001012 v2
Quant Time: 001017 08:32 Quant ID File: IDS91::MT
Injected at: **1016 16:36 Last Calibration: 000616 12:38
Last Qcal Time: **1016 11:41

Compound No : 6
Compound Name : Methylene Chloride
Scan Number : 100
Retention Time: 7.53 min.
Quant Ion : 84.0
Area : 12229
Concentration : 24.35 UG
q-value : 54



Data File: >D1879::D6
Name: mw0712.25
Misc: 7002d 001012 y2
Quant Time: 001017 08:32
Injected at: **1016 16:36
Last Qcal Time: **1016 11:41

Quant Outout File: ^D1879::QT
Instrument ID: 7002 D

Quant ID File: IDSS91::MT
Last Calibration: 000616 12:38

Compound No : 13
Compound Name : Chloroform
Scan Number : 151
Retention Time: 9.86 min.
Quant Ion : 83.0
Area : 3603
Concentration : 2.90 UG
q-value : 81

1A

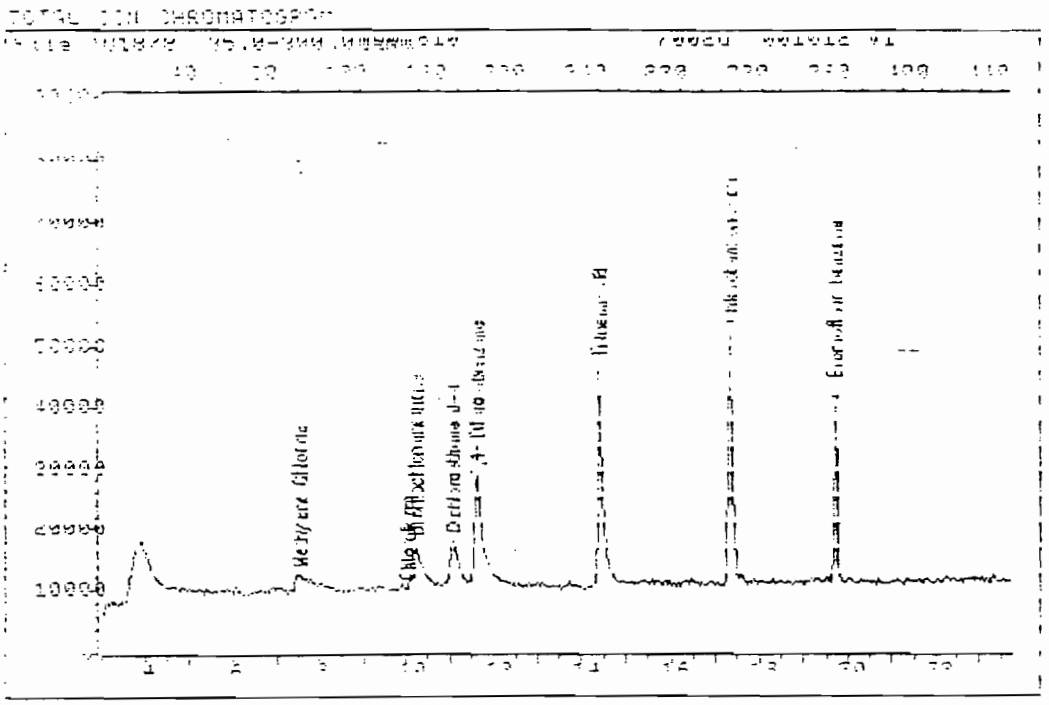
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW07610

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: MW07610
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1878
Level: (low/med) LOW Date Received: 10/12/00
% Moisture: not dec. 28. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14.	U
74-83-9	Bromomethane	14.	U
75-01-4	Vinyl Chloride	14.	U
75-00-3	Chloroethane	14.	U
75-09-2	Methylene Chloride	31.	B
67-64-1	Acetone	14.	U
75-15-0	Carbon Disulfide	14.	U
75-35-4	1,1-Dichloroethene	14.	U
75-34-3	1,1-Dichloroethane	14.	U
156-60-5	1,2-Dichloroethene-trans	14.	U
67-66-3	Chloroform	5.	J
107-06-2	1,2-Dichloroethane	14.	U
78-93-3	2-Butanone	14.	U
71-55-6	1,1,1-Trichloroethane	14.	U
56-23-5	Carbon Tetrachloride	14.	U
75-27-4	Bromodichloromethane	14.	U
78-87-5	1,2-Dichloropropane	14.	U
10061-01-5	cis-1,3-Dichloropropene	14.	U
79-01-6	Trichloroethene	14.	U
124-48-1	Dibromochloromethane	14.	U
79-00-5	1,1,2-Trichloroethane	14.	U
71-43-2	Benzene	14.	U
10061-02-6	trans-1,3-Dichloropropene	14.	U
75-25-2	Bromoform	14.	U
108-10-1	4-Methyl-2-Pentanone	14.	U
591-78-6	2-Hexanone	14.	U
127-18-4	Tetrachloroethene	14.	U
79-34-5	1,1,2,2-Tetrachloroethane	14.	U
108-88-3	Toluene	14.	U
108-90-7	Chlorobenzene	14.	U
100-41-4	Ethylbenzene	14.	U
100-42-5	Styrene	14.	U
156-59-2	1,2-Dichloroethene-cis	14.	U
106-42-3	m,p-Xylenes	14.	U
95-47-6	o-Xylene	14.	U



Data File: >D1878::D6 Quant Output File: ^D1878::QT
Name: mw07610 Instrument ID: 7002 D
Misc: 7002d 001012 v1

Id File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000614 12:39 Last Ocal Time: **1016 11:41

Operator ID: MAPES
Quant Time : 001017 08:30
Injected at: **1016 16:07

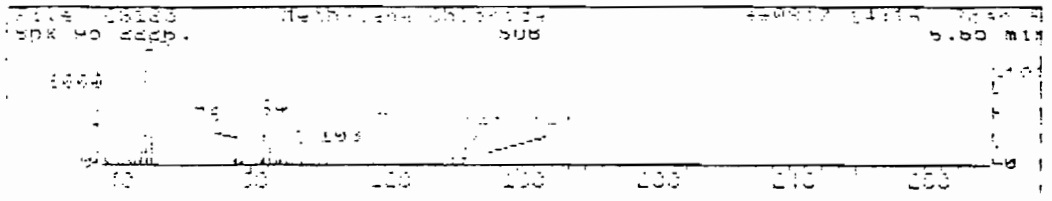
Operator ID: MAPIE Quant Rev: 7 Quant Time: 001017 08:30
Output File: ^D1879::DT Injected at: **1016 14:07
Data File: ^D1879::D4 Dilution Factor: 1.00000
Name: ww07610 Instrument ID: 7002 D
Misc: 7002d 001002 v1

IS File: IS88P1::MT
Title: HP V8A Continuing Calibration Standard
Last Calibration: 000414 12:39 Last Qual Time: **1014 11:41

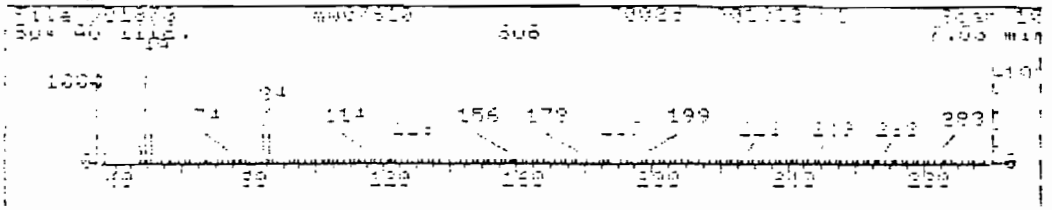
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.19	128.0	11826	50.00	UG	99
6)	Methylene Chloride	7.53	84.0	11067	22.29	UG	50
18)	Chloroform	10.00	83.0	4562	3.72	UG	70
19)	1,2-Dichloroethane-d4	11.05	65.0	41137	46.64	UG	10
22)	*1,4-Difluorobenzene	11.60	114.0	71438	50.00	UG	93
31)	Chlorobenzene-d5	17.32	117.0	65403	50.00	UG	93
42)	Toluene d-8	14.76	98.0	98833	47.10	UG	94
43)	Bromofluorobenzene	19.70	95.0	30404	47.14	UG	40

* Compound is ISTD

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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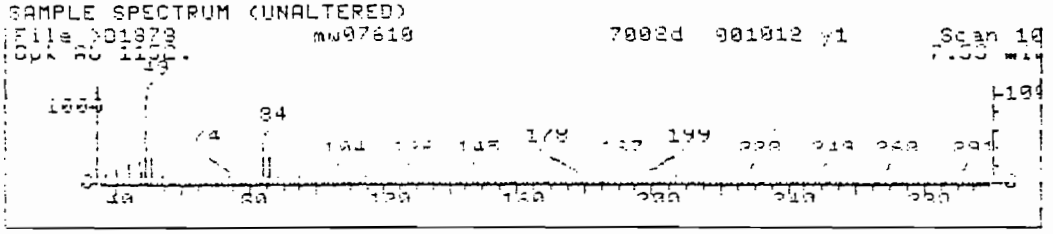
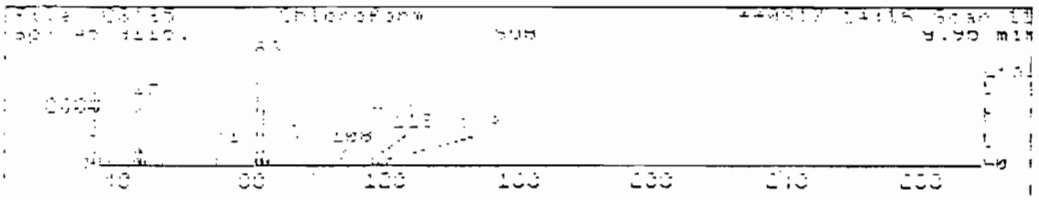


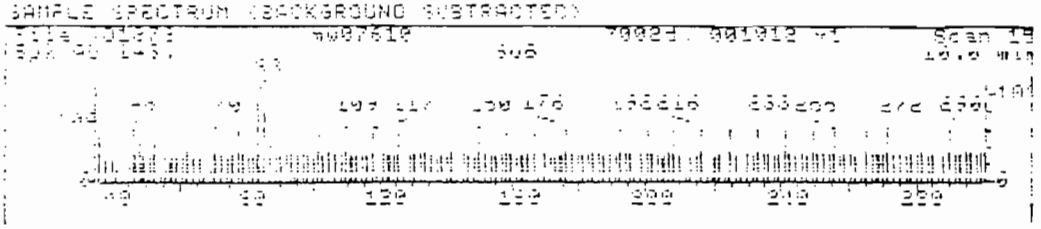
Data File: >D1878::D6 Quant Output File: ^D1878::QT
Name: mw07610 Instrument ID: 7002 D
Misc: 7002d 901012 y1
Quant Time: 901017 08:30 Quant ID File: IDSS91::MT
Injected at: **1016 16:07 Last Calibration: 900616 12:38
Last Qcal Time: **1016 11:41

Compound No : 6
Compound Name : Methylene Chloride
Scan Number : 100
Retention Time: 7.53 min.
Quant Ion : 84.0
Area : 11067
Concentration : 22.29 UG
q-value : 50

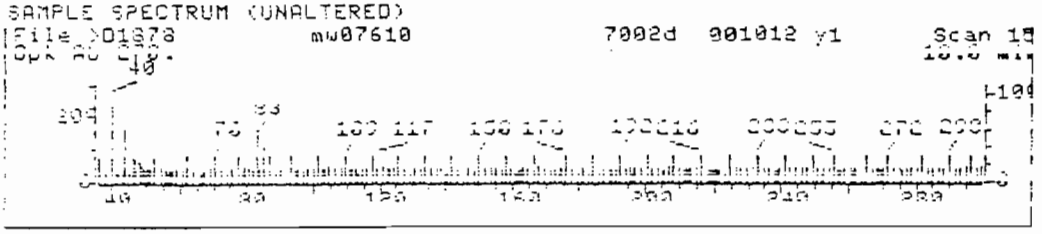
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: D1878::D6
Name: mw07610
Misc: 7002d 001012 v1
Quant Time: 001017 08:30
Injected at: **1016 16:07
Last Qcal Time: **1016 11:41

Quant Output File: ^D1878::QT
Instrument ID: 7002 D

Quant ID File: IDSS91::MT
Last Calibration: 000616 12:38

Compound No : 19
Compound Name : Chloroform
Scan Number : 154
Retention Time: 10.00 min.
Quant Ion : 83.0
Area : 4562
Concentration : 3.72 UG
q-value : 70

1A

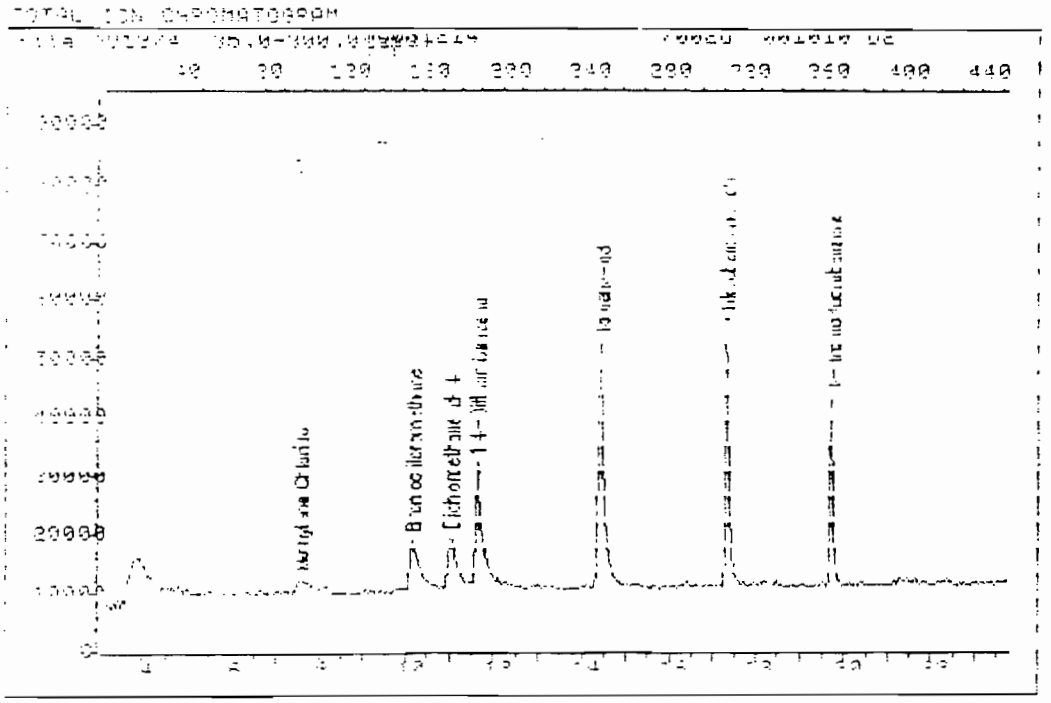
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW081214

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: MW081214
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1874
Level: (low/med) LOW Date Received: 10/11/00
% Moisture: not dec. 15. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12.	U
74-83-9	Bromomethane	12.	U
75-01-4	Vinyl Chloride	12.	U
75-00-3	Chloroethane	12.	U
75-09-2	Methylene Chloride	17.	B
67-64-1	Acetone	12.	U
75-15-0	Carbon Disulfide	12.	U
75-35-4	1,1-Dichloroethene	12.	U
75-34-3	1,1-Dichloroethane	12.	U
156-60-5	1,2-Dichloroethene-trans	12.	U
67-66-3	Chloroform	12.	U
107-06-2	1,2-Dichloroethane	12.	U
78-93-3	2-Butanone	12.	U
71-55-6	1,1,1-Trichloroethane	12.	U
56-23-5	Carbon Tetrachloride	12.	U
75-27-4	Bromodichloromethane	12.	U
78-87-5	1,2-Dichloropropane	12.	U
10061-01-5	cis-1,3-Dichloropropene	12.	U
79-01-6	Trichloroethene	12.	U
124-48-1	Dibromochloromethane	12.	U
79-00-5	1,1,2-Trichloroethane	12.	U
71-43-2	Benzene	12.	U
10061-02-6	trans-1,3-Dichloropropene	12.	U
75-25-2	Bromoform	12.	U
108-10-1	4-Methyl-2-Pentanone	12.	U
591-78-6	2-Hexanone	12.	U
127-18-4	Tetrachloroethene	12.	U
79-34-5	1,1,2,2-Tetrachloroethane	12.	U
108-88-3	Toluene	12.	U
108-90-7	Chlorobenzene	12.	U
100-41-4	Ethylbenzene	12.	U
100-42-5	Styrene	12.	U
156-59-2	1,2-Dichloroethene-cis	12.	U
106-42-3	m,p-Xylenes	12.	U
95-47-6	o-Xylene	12.	U



Data File: ^D1874::D6 Quant Output File: ^D1874::SS
Name: mw081214 Instrument ID: 7002 D
Misc: 7002d 001010 b2

Id File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000614 12:38 Last Ocal Time: **1016 11:41

Operator ID: MARIE
Quant Time : 001016 14:38
Injected at: **1016 14:09

QUANT REPORT Page

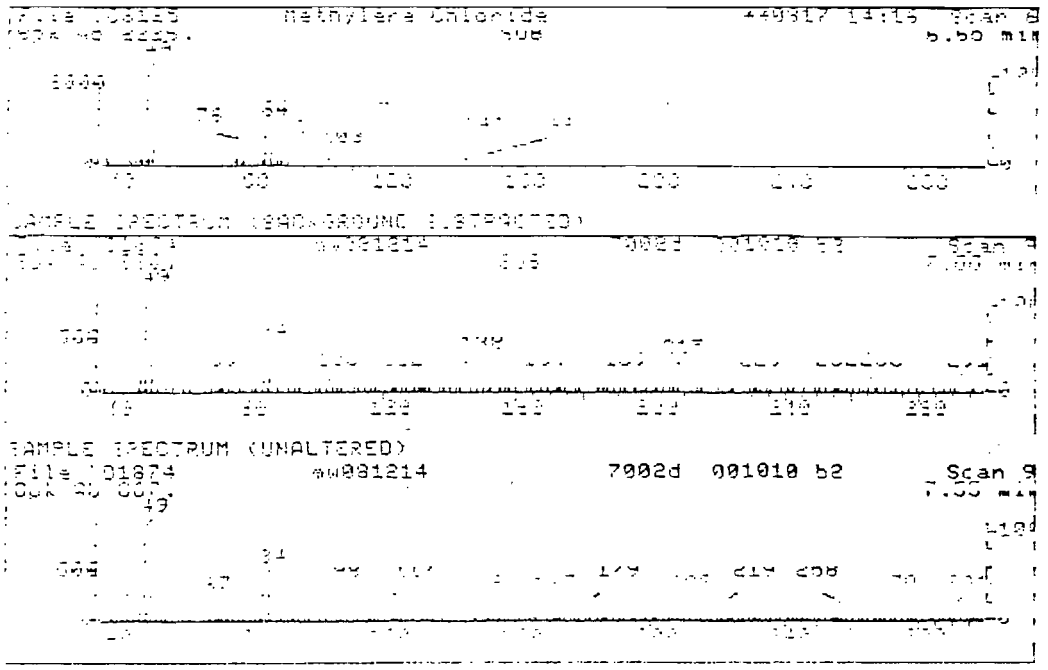
Operator ID: MARIS Quant Pgm: 7 Quant Time: 001016 14:38
Output File: ^D1974::SS Injected at: **1016 14:09
Data File: D1974::D4 Dilution Factor: 1.00000
Name: ^^081314 Instrument ID: 7002 D
Misc: 7002d 001010 b2

ID File: [redacted]
Title: HP VOA Continuing Calibration Standard
Last Calibration: [redacted] Last Cal Time: **1016 11:41

	Compound	R.T.	Q ion	Area	Conc	Units	c
1)	*Bromochloromethane	10.16	128.0	14544	50.00	UG	88
6)	Methylene Chloride	7.55	84.0	8666	14.19	UG	5(
19)	1,2-Dichloroethane-d4	11.03	65.0	44397	40.93	UG	10(
22)	1,4-Difluorobenzene	11.62	114.0	80294	50.00	UG	9(
34)	*Chlorobenzene-d5	17.29	117.0	73522	50.00	UG	91
39)	Toluene-d8	14.41	98.0	117913	50.19	UG	9(
41)	Bromofluorobenzene	19.72	95.0	37036	50.88	UG	3(

* Compound is ISTD

REFERENCE STANDARD SPECTRUM



Data File: D1874::D6 Quant Output File: ^D1874::99
Name: ww081214 Instrument ID: 7002 D
Misc: 7002d 001010 b2
Quant Time: 001016 14:38 Quant ID File: IDS891::MT
Injected at: **1016 14:09 Last Calibration: 000616 12:38
Last Qual Time: **1016 11:41

Compound No : 6
Compound Name : Methylene Chloride
Scan Number : 99
Retention Time: 7.55 min.
Quant Ion : 84.0
Area : 8666
Concentration : 14.19 UG
q-value : 50

1A

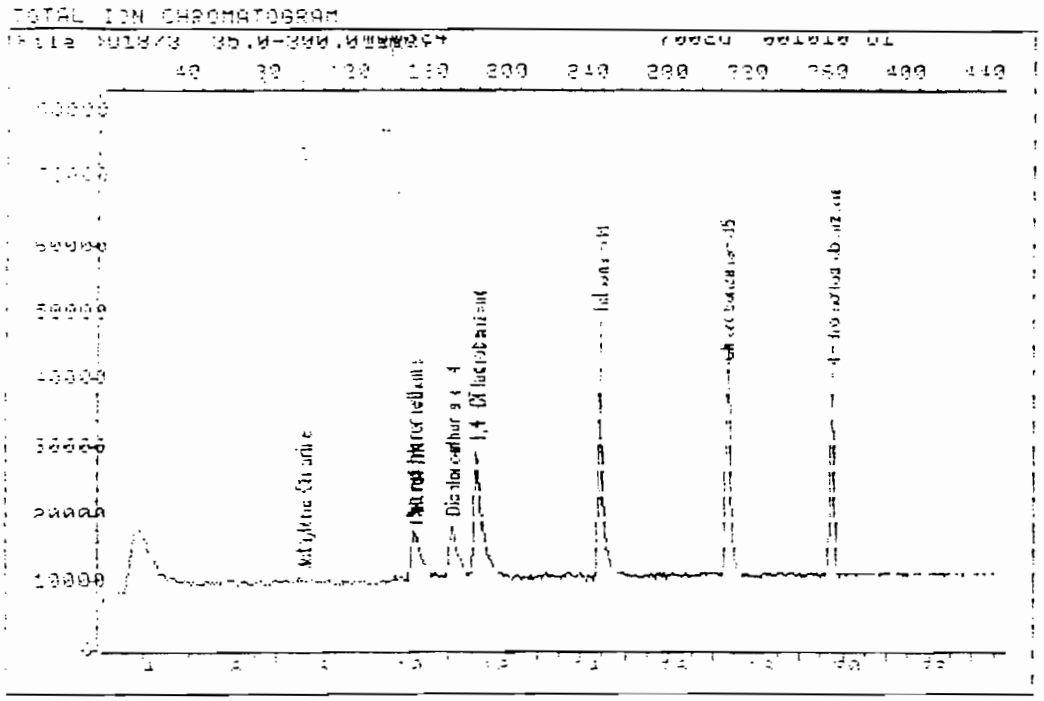
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW0824

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: MW0824
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1873
Level: (low/med) LOW Date Received: 10/11/00
% Moisture: not dec. 7. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	3.	BJ
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
156-60-5	1,2-Dichloroethene-trans	11.	U
67-66-3	Chloroform	1.	J
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	11.	U
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
156-59-2	1,2-Dichloroethene-cis	11.	U
106-42-3	m,p-Xylenes	11.	U
95-47-6	o-Xylene	11.	U



Data File: ^D1873::D6 Quant Output File: ^D1873::SS
Name: mw0824 Instrument ID: 7002 D
Misc: 70024 001010 b1

Id File: ID8891::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000614 12:38 Last Ocal Time: **1014 11:41

Operator ID: MAPIE
Quant Time : 001016 14:36
Injected at: **1016 13:39

QUANT REPORT Page 1

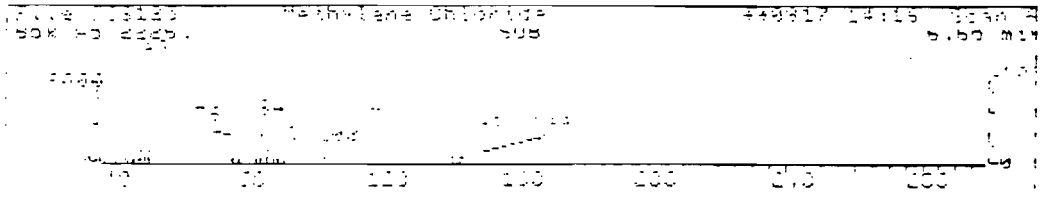
Operator ID: MARIE Quant Rev: 7 Quant Time: 001016 14:36
Output File: >01077::99 Injected at: **1016 13:39
Data File: >01077::04 Dilution Factor: 1.00000
Name: [illegible] Instrument ID: 7002 D
Misc: 7002f 001010 51

ID File: 10337::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000414 12:39 Last Opal Time: **1016 11:41

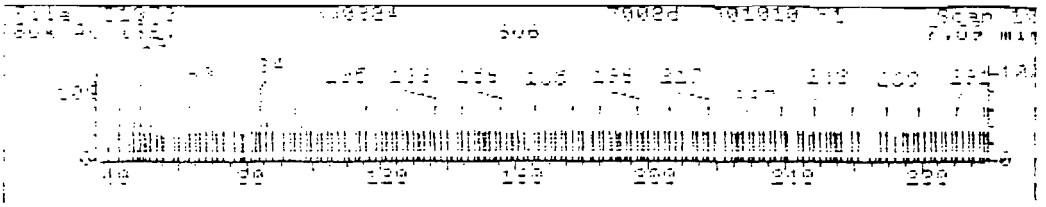
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.15	128.0	12663	50.00	UG	9
6)	Methylene Chloride	7.59	84.0	1471	2.77	UG	6
18)	Chloroform	10.20	83.0	1542	1.17	UG	5
19)	1,2-Dichloroethane-d4	11.07	65.0	45404	48.08	UG	10
22)	*1,4-Difluorobenzene	11.62	114.0	69003	50.00	UG	9
36)	*Chlorobenzene-d5	17.29	117.0	64909	50.00	UG	9
42	Toluene d-8	14.41	98.0	103640	49.97	UG	9
48)	Bromofluorobenzene	19.71	95.0	32067	49.90	UG	4

* Compound is ISTD

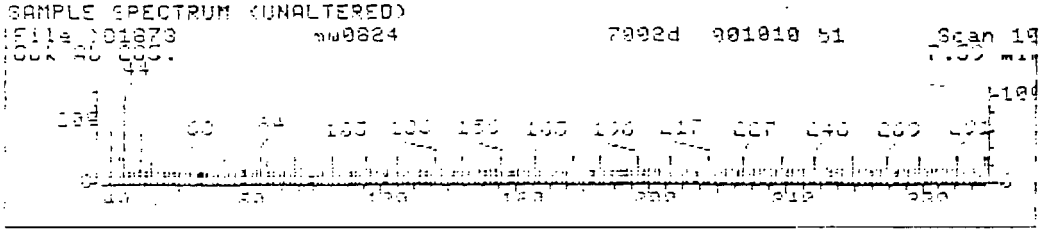
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

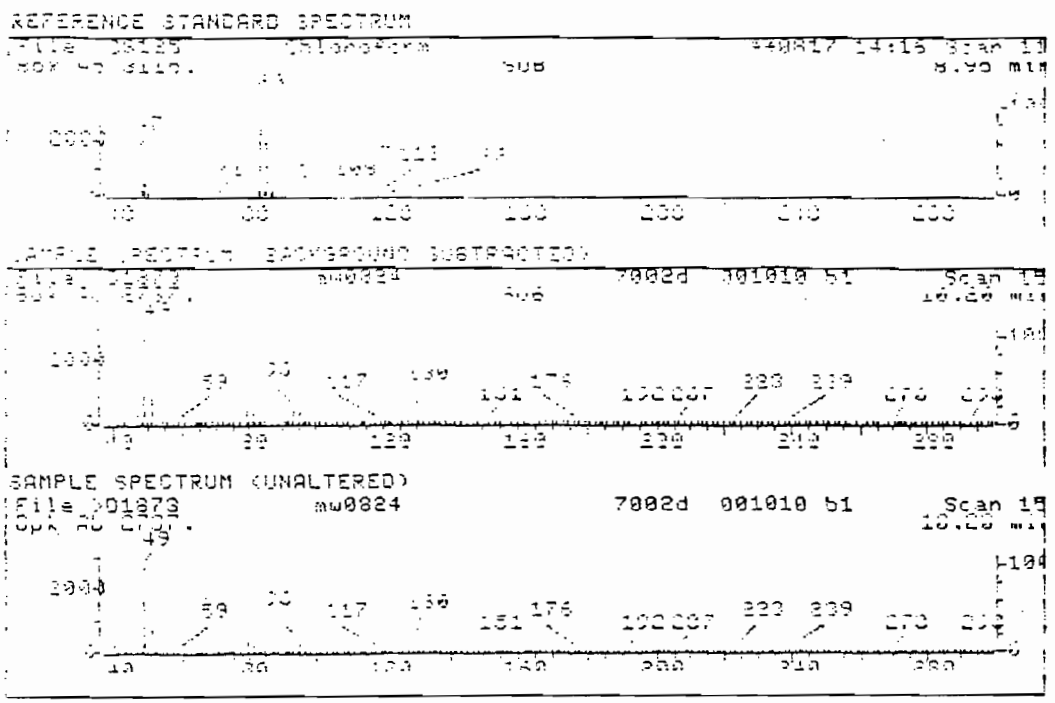


SAMPLE SPECTRUM (UNALTERED)



Data File: >D1873::D6 Quant Output File: ^D1873::SS
Name: mw0824 Instrument ID: 7002 D
Misc: 7002d 001010 51
Quant Time: 001014 14:34 Quant ID File: IDSS91::MT
Injected at: **1014 13:39 Last Calibration: 000614 12:39
Last Qcal Time: **1014 11:41

Compound No : 6
Compound Name : Methylene Chloride
Scan Number : 101
Retention Time: 7.59 min.
Quant Ion : 84.0
Area : 1471
Concentration : 2.77 UG
q-value : 68



Data File: ^D1873::D6
Name: mw0824
Misc: 7002d 001010 b1
Quant Time: 001014 14:36
Injected at: **1016 13:39
Last Qcal Time: **1016 11:41

Quant Output File: ^D1873::SS
Instrument ID: 7002 D

Quant ID File: IDSS91::MT
Last Calibration: 000616 12:38

Compound No : 18
Compound Name : Chloroform
Scan Number : 158
Retention Time: 10.20 min.
Quant Ion : 83.0
Area : 1542
Concentration : 1.17 UG
c-value : 56

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

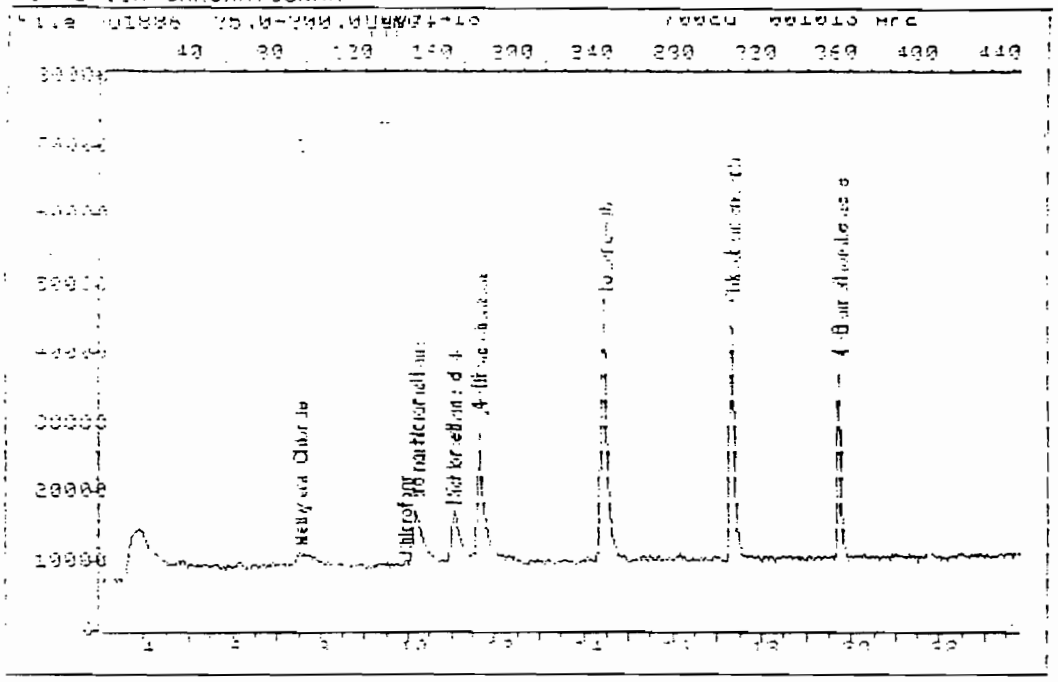
EPA SAMPLE NO.

MW091418

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: MW091418
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1886
Level: (low/med) LOW Date Received: 10/13/00
% Moisture: not dec. 9. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	25.	B
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
156-60-5	1,2-Dichloroethene-trans	11.	U
67-66-3	Chloroform	3.	J
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	11.	U
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
156-59-2	1,2-Dichloroethene-cis	11.	U
106-42-3	m,p-Xylenes	11.	U
95-47-6	o-Xylene	11.	U

TOTAL ION CHROMATOGRAM



Data File: ^D1886::D6 Quant Output File: ^D1886::QT
Name: MW091418 Instrument ID: 7002 D
Misc: 7002d 001013 AF2

Id File: IDSS91::MT
Title: HP UCA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1016 11:41

Operator ID: MARIE
Quant Time : 001017 08:54
Injected at: **1016 20:03

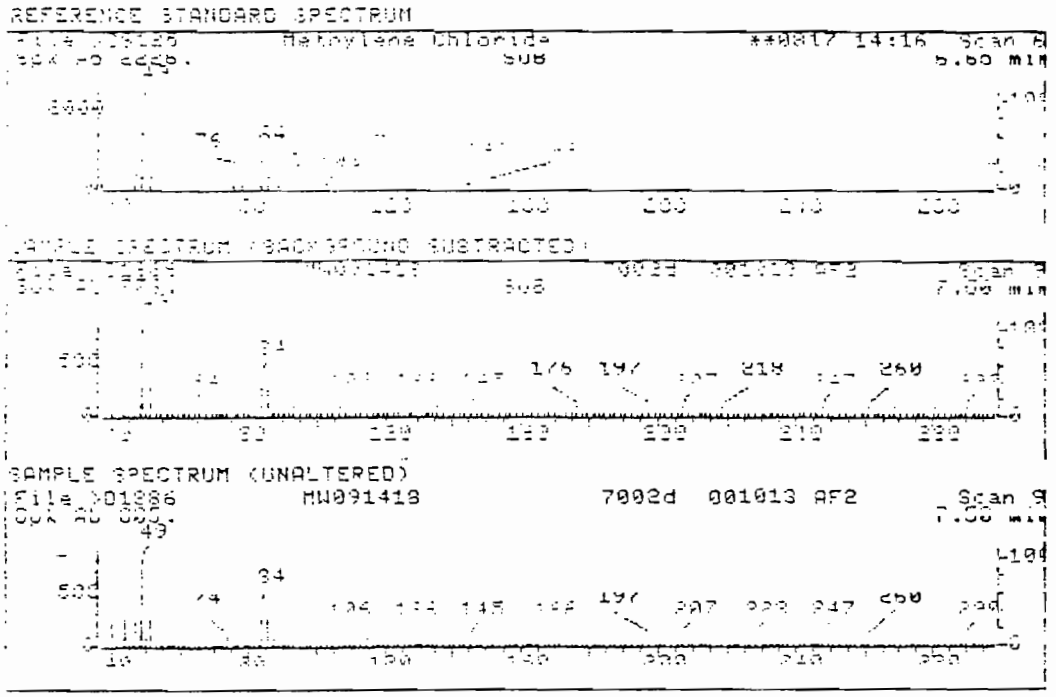
QUANT REPORT Page 1

Operator ID: MARIE Quant Rev: 7 Quant Time: 001017 08:54
Output File: >D1896::QT Injected at: **1016 20:03
Data File: >D1886::D6 Dilution Factor: 1.00000
Name: VW091-19 Instrument ID: 7000 D
Misc: 70104 001013 AFC

ID File: >D0991::MT
Title: HP VOC Continuing Calibration Standard
Last Calibration: 100414 10:37 Last Qual Time: **1016 11:41

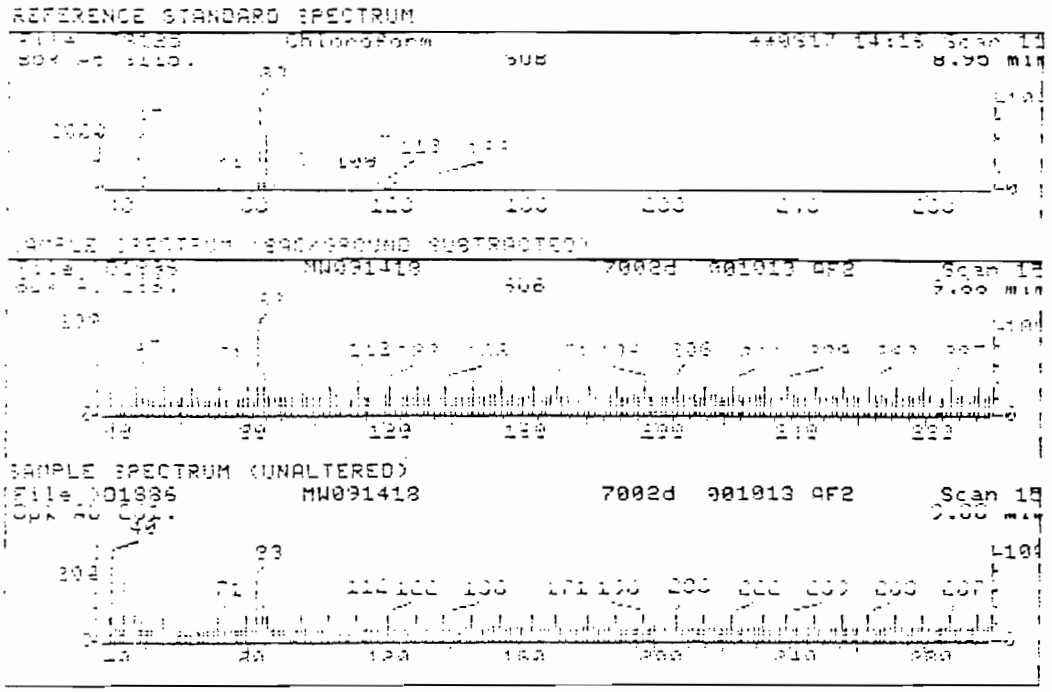
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.14	128.0	11272	50.00	UG	96
6)	Methylene Chloride	7.50	84.0	10789	22.80	UG	54
18)	Chloroform	9.89	83.0	3532	3.02	UG	78
19)	1,2-Dichloroethane-d4	11.03	65.0	41000	48.77	UG	100
20)	*1,4-Difluorobenzene	11.62	114.0	68113	50.00	UG	95
36)	Chlorobenzene-d5	17.29	117.0	64073	50.00	UG	93
40)	Toluene d-8	14.41	98.0	104816	51.19	UG	96
49)	Bromofluorobenzene	19.72	95.0	32871	51.82	UG	40

* Compound is ISTD



Data File: ^D1886::D6 Quant Output File: ^D1886::QT
Name: MW091418 Instrument ID: 7002 D
Misc: 7002d 001013 AF2
Quant Time: 001017 08:54 Quant ID File: IDSS91::MT
Injected at: **1016 20:03 Last Calibration: 000616 12:38
Last Qcal Time: **1016 11:41

Compound No : 6
Compound Name : Methylene Chloride
Scan Number : 98
Retention Time: 7.50 min.
Quant Ion : 84.0
Area : 10789
Concentration : 22.80 UG
q-value : 54



Data File: >D1886::D6
Name: MW091418
Misc: 7002d 001013 BF2
Quant Time: 001017 08:54
Injected at: **1016 20:03
Last Qcal Time: **1016 11:41

Quant Output File: ^D1886::QT
Instrument ID: 7002 D

Quant ID File: IDS91::MT
Last Calibration: 000616 12:38

Compound No : 19
Compound Name : Chloroform
Scan Number : 150
Retention Time: 9.83 min.
Quant Ion : 83.0
Area : 3532
Concentration : 3.02 UG
q-value : 79

1A

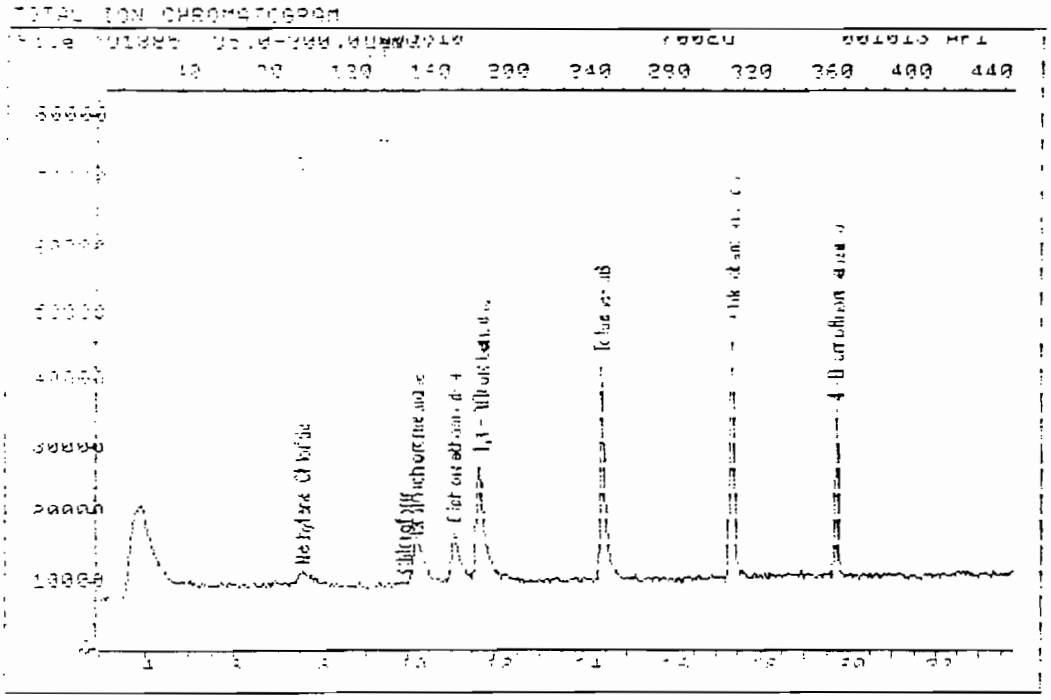
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW09810

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: MW09810
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1885
Level: (low/med) LOW Date Received: 10/13/00
% Moisture: not dec. 22. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13.	U
74-83-9	Bromomethane	13.	U
75-01-4	Vinyl Chloride	13.	U
75-00-3	Chloroethane	13.	U
75-09-2	Methylene Chloride	29.	B
67-64-1	Acetone	13.	U
75-15-0	Carbon Disulfide	13.	U
75-35-4	1,1-Dichloroethene	13.	U
75-34-3	1,1-Dichloroethane	13.	U
156-60-5	1,2-Dichloroethene-trans	13.	U
67-66-3	Chloroform	4.	J
107-06-2	1,2-Dichloroethane	13.	U
78-93-3	2-Butanone	13.	U
71-55-6	1,1,1-Trichloroethane	13.	U
56-23-5	Carbon Tetrachloride	13.	U
75-27-4	Bromodichloromethane	13.	U
78-87-5	1,2-Dichloropropane	13.	U
10061-01-5	cis-1,3-Dichloropropene	13.	U
79-01-6	Trichloroethene	13.	U
124-48-1	Dibromochloromethane	13.	U
79-00-5	1,1,2-Trichloroethane	13.	U
71-43-2	Benzene	13.	U
10061-02-6	trans-1,3-Dichloropropene	13.	U
75-25-2	Bromoform	13.	U
108-10-1	4-Methyl-2-Pentanone	13.	U
591-78-6	2-Hexanone	13.	U
127-18-4	Tetrachloroethene	13.	U
79-34-5	1,1,2,2-Tetrachloroethane	13.	U
108-88-3	Toluene	13.	U
108-90-7	Chlorobenzene	13.	U
100-41-4	Ethylbenzene	13.	U
100-42-5	Styrene	13.	U
156-59-2	1,2-Dichloroethene-cis	13.	U
106-42-3	m,p-Xylenes	13.	U
95-47-6	o-Xylene	13.	U



Data File: ^D1885::D6 Quant Output File: ^D1885::QT
Name: MW09R10 Instrument ID: 7002 D
Misc: 7002d 001013 AF1

Id File: IDS891::MT
Title: HP 8DA Continuing Calibration Standard
Last Calibration: 000614 12:38 Last Ocal Time: **1016 11:41

Operator ID: MARIE
Quan: Time : 001017 08:50
Injected at: **1016 19:33

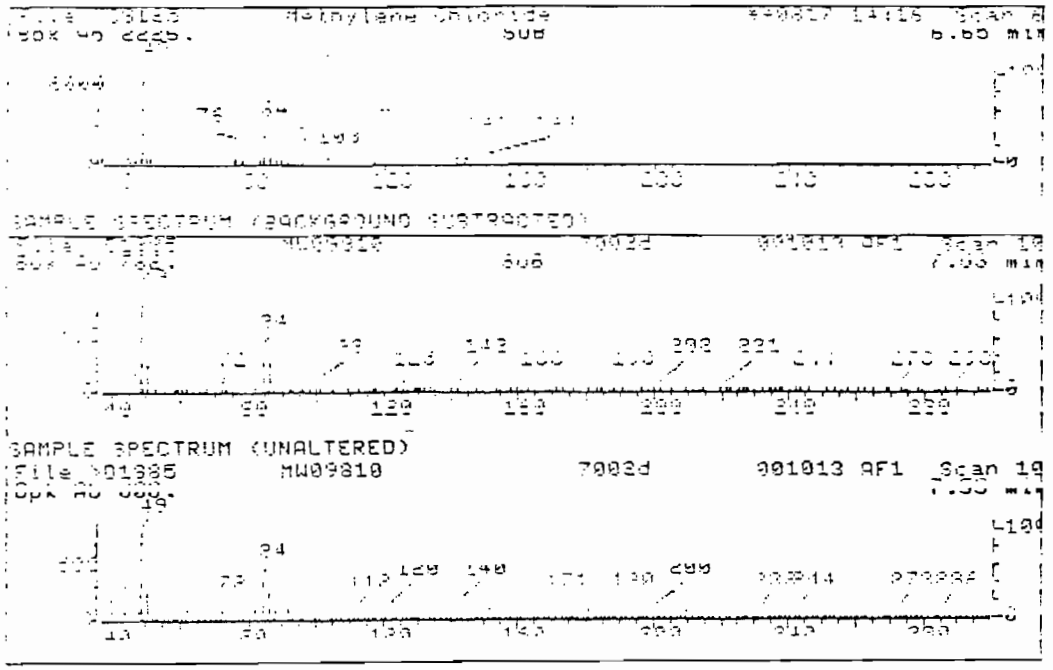
QUANT REPORT Page 1

Operator ID: MARIE Quant Rev: 7 Quant Time: 001017 08:50
Data File: D1899::DT Injected at: **1016 19:33
Data File: >D1899::DA Dilution Factor: 1.00000
Name: MW09910 Instrument ID: 7002 D
Misc: 7102c 001013 8F1

DA File: DB89P1::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000-16 10:39 Last Qual Time: **1016 11:41

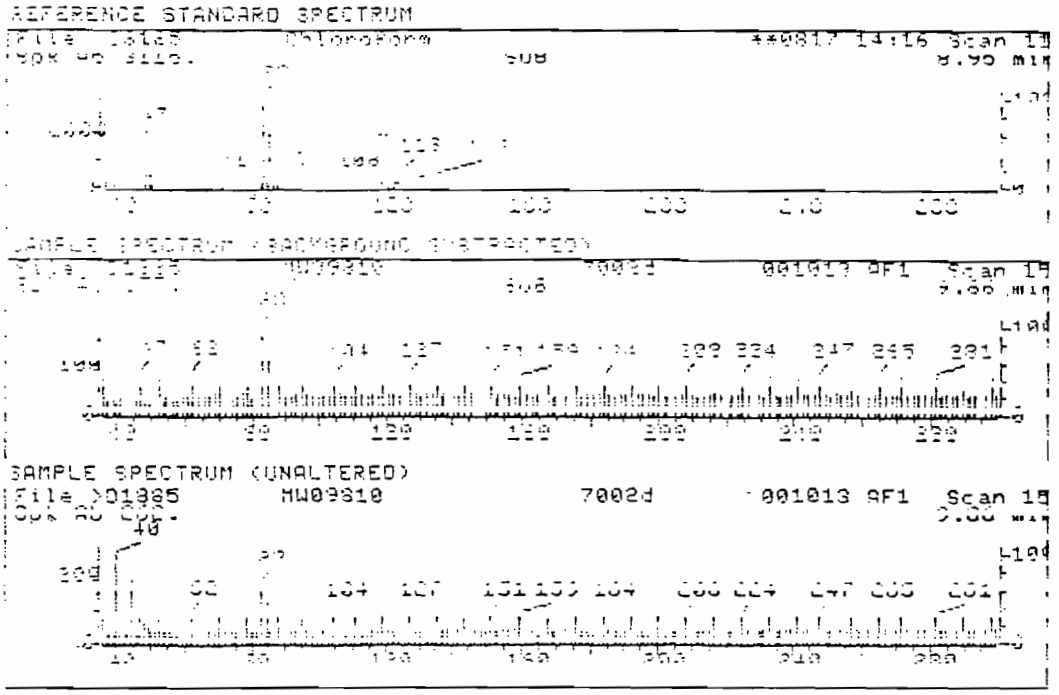
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.13	128.0	11198	50.00	UG	8
6)	Methylene Chloride	7.53	84.0	10645	22.64	UG	5
18)	Chloroform	9.86	83.0	3924	3.38	UG	9
19)	1,2-Dichloroethane-d4	11.05	65.0	38958	46.65	UG	10
22)	*1,4-Difluorobenzene	11.64	114.0	66177	50.00	UG	9
34)	Chlorobenzene-d5	17.32	117.0	59330	50.00	UG	9
40)	Toluene d-8	14.39	98.0	92462	48.77	UG	9
48)	Bromofluorobenzene	19.70	95.0	27879	47.46	UG	5

* Compound is ISTD



Data File: ^D1885::D6 Quant Output File: ^D1885::QT
Name: MW09810 Instrument ID: 7002 D
Misc: 7002d 001013 AF1
Quant Time: 001017 08:50 Quant ID File: IDSS91::MT
Injected at: **1016 19:33 Last Calibration: 000616 12:38
Last Qcal Time: **1016 11:41

Compound No : 6
Compound Name : Methylene Chloride
Scan Number : 100
Retention Time: 7.53 min.
Quant Ion : 84.0
Area : 10645
Concentration : 22.64 UG
q-value : 53



Data File: D1885::06 Quant Output File: D1885::QT
Name: MW09810 Instrument ID: 7002 D
Misc: 7002d 001013 AF1
Quant Time: 001017 08:50 Quant ID File: IDSS91::MT
Injected at: **1016 19:33 Last Calibration: 000616 12:38
Last Qcal Time: **1016 11:41

Compound No : 18
Compound Name : Chloroform
Scan Number : 151
Retention Time: 9.86 min.
Quant Ion : 83.0
Area : * 3924
Concentration : 3.38 UG
q-value : 99

1A

EPA SAMPLE NO.

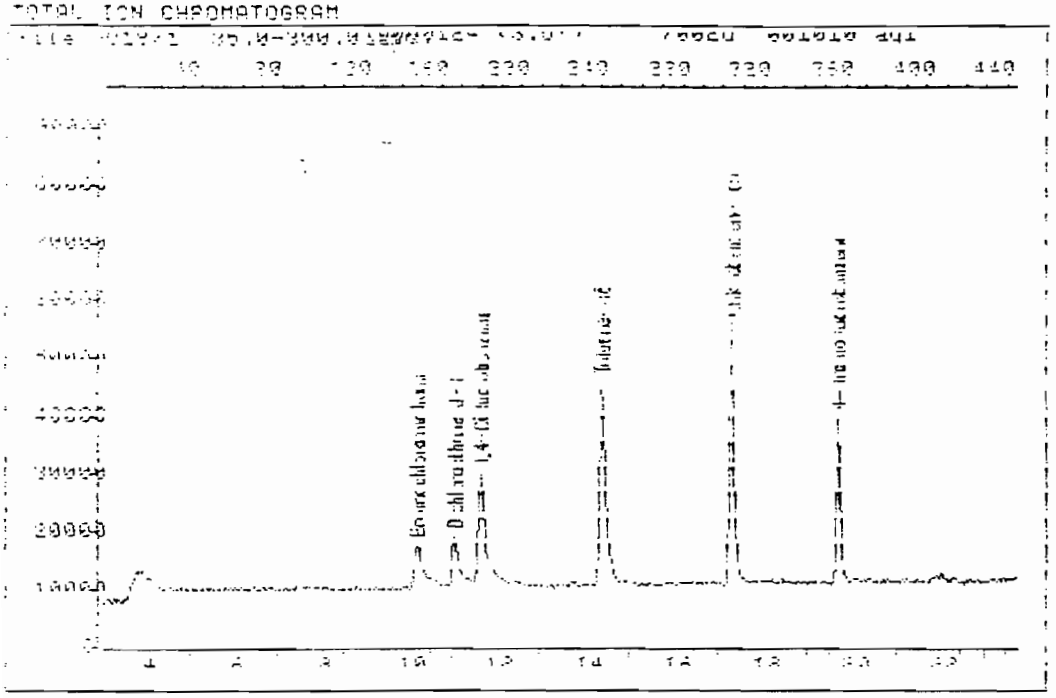
VOLATILE ORGANICS ANALYSIS DATA SHEET

TP0001

b Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: TP0001 24(3.5)
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1871
Level: (low/med) LOW Date Received: 10/10/00
% Moisture: not dec. 6. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	11.	U
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
156-60-5	1,2-Dichloroethene-trans	11.	U
67-66-3	Chloroform	11.	U
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	11.	U
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
156-59-2	1,2-Dichloroethene-cis	11.	U
106-42-3	m,p-Xylenes	11.	U
95-47-6	o-Xylene	11.	U

TOTAL ION CHROMATOGRAM



Data File: ^D1871::D6 Quant Output File: ^D1871::SS
Name: to000124 (3.5') Instrument ID: 7002 D
Misc: 7002d 001010 eq1

Id File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qual Time: **1016 11:41

Operator ID: MARIE
Quant Time : 001016 13:47
Injected at: **1016 12:40

QUANT REPORT Page 1

Operator ID: MARIS Quant Rev: 7 Quant Time: 001016 13:47
Output File: D1871::33 Injected at: **1016 12:40
Data File: D1871::04 Dilution Factor: 1.00000
Name: 000104 (3,5'\... Instrument ID: 7002 D
Misc: 7102a 991010 1

Al File: D1871::7
Title: 40 UDA Continuing Calibration Standard
Last Calibration: 991016 12:39 Last Cal Time: **1016 11:41

	Compound	R.T.	Q ion	Area	Conc	Units	a
1)	*Bromochloromethane	10.18	128.0	13711	50.00	UG	8
19)	1,2-Dichloroethane-d4	11.05	65.0	42050	41.12	UG	10
22)	*1,4-Difluorobenzene	11.64	114.0	74464	50.00	UG	9
36)	*Chlorobenzene-d5	17.32	117.0	68643	50.00	UG	9
42)	Toluene d-8	14.39	98.0	102416	46.69	UG	9
43)	Bromofluorobenzene	19.69	95.0	32532	47.97	UG	5

* Compound is ISTD

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

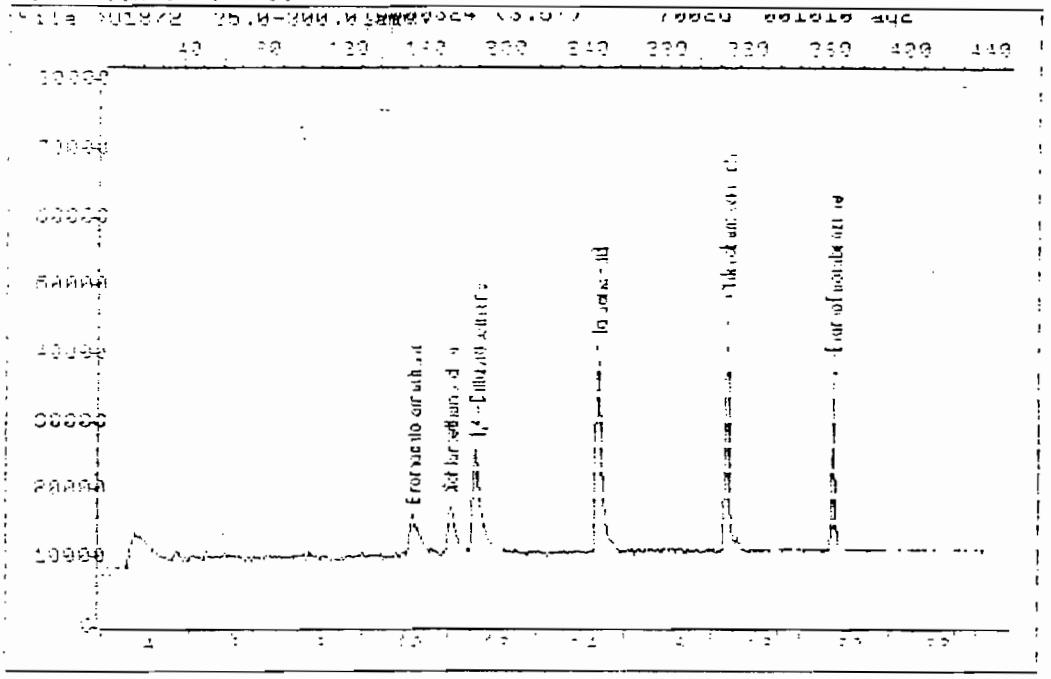
EPA SAMPLE NO.

TP0003

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: TP0003 24(3.5)
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1872
Level: (low/med) LOW Date Received: 10/10/00
% Moisture: not dec. 7. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	11.	U
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
156-60-5	1,2-Dichloroethene-trans	11.	U
67-66-3	Chloroform	11.	U
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	11.	U
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
156-59-2	1,2-Dichloroethene-cis	11.	U
106-42-3	m,p-Xylenes	11.	U
95-47-6	o-Xylene	11.	U

TOTAL ION CHROMATOGRAM



Data File: D1872::D6 Quant Outout File: ^D1872::SS
Name: tp000724 (3.5') Instrument ID: 7002 D
Misc: 7002# 001016 sc2

Id File: ID9891::MT
Title: 8270 Continuing Calibration Standard
Last Calibration: 000616 12:39 Last Qcal Time: **1016 11:41

Operator ID: MARIE
Quant Time : 001016 13:48
Injected at: **1016 13:10

QUANT REPORT Page 1

Operator ID: MAPIS Quant Rev: 7 Quant Time: 001016 13:48
Outbut File: "01872::39 Injected at: **1016 13:10
Data File: >01872::04 Dilution Factor: 1.00000
Name: 12300704, 7,F'' " Instrument ID: 7000 0
Misc: F1001 20101C 40C

IS File: 00991::MT
Title: EP UCA Curtain,ing Calibration Standard
Last Calibration: 001:16 10:39 Last Qual Time: **1014 11:41

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.18	128.0	11964	50.00	UG	9
19)	1,2-Dichloroethane-d4	11.05	65.0	38532	43.19	UG	10
22)	*1,4-Difluorobenzene	11.64	114.0	61198	50.00	UG	9
36)	*Chlorobenzene-df	17.32	117.0	56888	50.00	UG	9
40)	Toluene d-8	14.39	98.0	86780	47.74	UG	9
43)	Bromofluorobenzene	19.69	95.0	28708	50.97	UG	9

* Compound is ISTD

1A

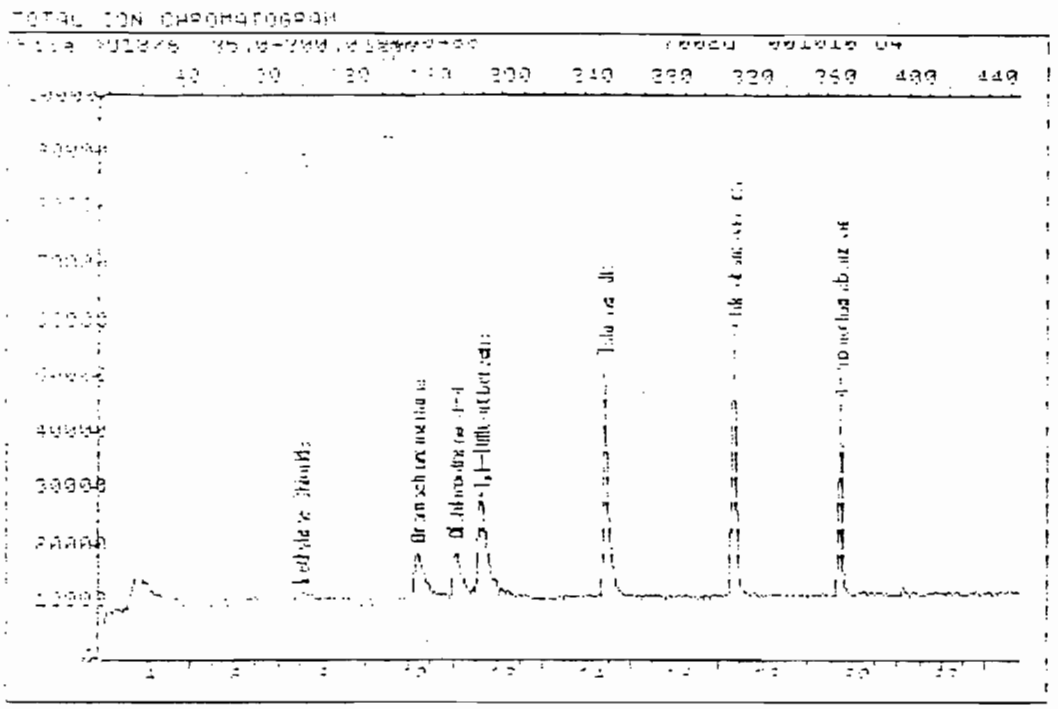
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TP000468

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: TP000468
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1876
Level: (low/med) LOW Date Received: 10/11/00
% Moisture: not dec. 10. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	15.	B
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
156-60-5	1,2-Dichloroethene-trans	11.	U
67-66-3	Chloroform	11.	U
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	11.	U
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
156-59-2	1,2-Dichloroethene-cis	11.	U
106-42-3	m,p-Xylenes	11.	U
95-47-6	o-Xylene	11.	U



Data File: ^D1876::D6
Name: tp000448
Misc: 7002# 001010 b4

Quant Output File: ^D1876::SS
Instrument ID: 7002 D

Id File: [DSS^1::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:32

Last Qcal Time: **1016 11:41

Operator ID: MARIE
Quant Time : 001016 16:16
Injected at: **1016 15:08

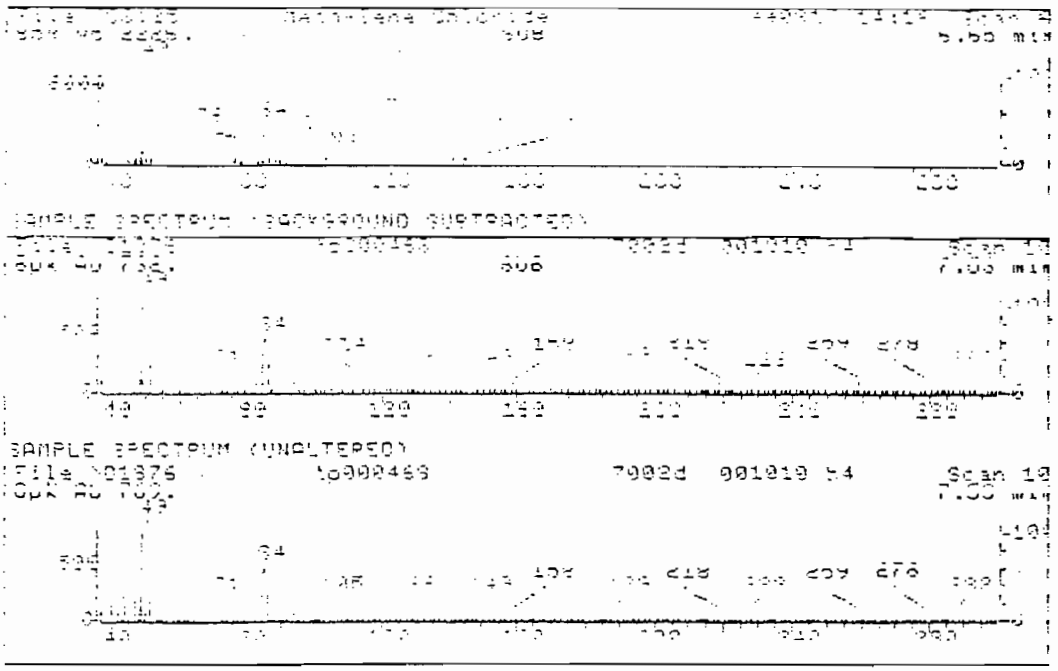
QUANT REPORT Page 1

Operator ID: MARIE Quant Rev: 7 Quant Time: 001016 16:14
Initial File: :D1974::33 Injected at: **1016 15:09
Data File: :D1974::04 Dilution Factor: 1.00000
Name: cs0006468 Instrument ID: 7002 D
Misc: 70024 001010 54

ID File: :D9691::MT
Title: HP U04 Continuing Calibration Standard
Last Calibration: 000815 12:38 Last Qual Time: **1015 11:41

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.19	128.0	14505	50.00	UG	83
6)	Methylene Chloride	7.53	84.0	8468	13.91	UG	54
19)	1,2-Dichloroethane-d4	11.05	65.0	49026	45.32	UG	100
22)	*1,4-Difluorobenzene	11.60	114.0	74390	50.00	UG	96
34)	*Chlorobenzene-d5	17.32	117.0	70829	50.00	UG	93
41)	Toluene d-8	14.39	98.0	115509	51.03	UG	99
51)	Bromofluorobenzene	19.70	95.0	36571	52.15	UG	51

* Compound is ISTD



Data File: ^01876::06
Name: tp000469
Misc: 7002d 001010 54
Quan Time: 001016 14:16
Injected at: **1016 15:03
Last Qcal Time: **1016 11:41

Quant Output File: ^01876::SS
Instrument ID: 7002 D
Quant ID File: IDSS91::MT
Last Calibration: 000616 12:38

Compound No : 6
Compound Name : Methylene Chloride
Scan Number : 100
Retention Time: 7.53 min.
Quant Ion : 84.0
Area : 8468
Concentration : 13.91 UG
q-value : 54

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

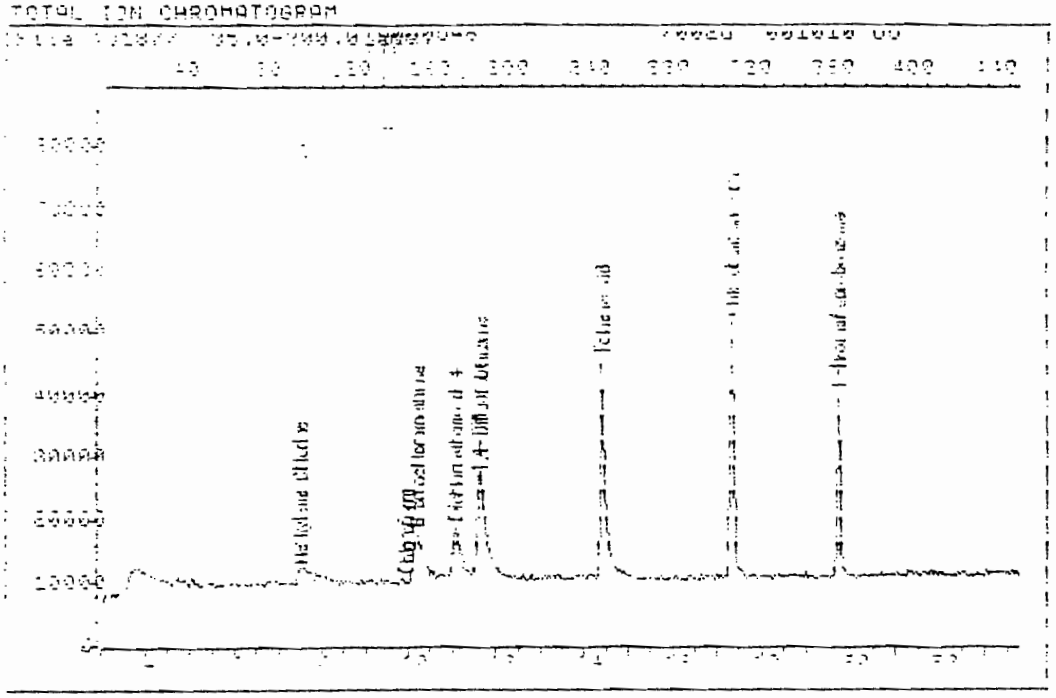
EPA SAMPLE NO.

TP000546

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: TP000546
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1877
Level: (low/med) LOW Date Received: 10/11/00
% Moisture: not dec. 11. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	30.	B
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
156-60-5	1,2-Dichloroethene-trans	11.	U
67-66-3	Chloroform	4.	J
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	11.	U
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
156-59-2	1,2-Dichloroethene-cis	11.	U
106-42-3	m,p-Xylenes	11.	U
95-47-6	o-Xylene	11.	U

TOTAL ION CHROMATOGRAM



Data File: :D1877::D6 Quant Output File: ^D1877::SS
Name: to000546 Instrument ID: 7002 D
Misc: 7002d 001010 b5

Id File: [DSS91::MT
Title: HP UOA Continuing Calibration Standard
Last Calibration: 000616 10:38 Last Qual Time: **1016 11:41

Operator ID: MARIE
Quant Time : 001016 16:21
Injected at: **1016 15:37

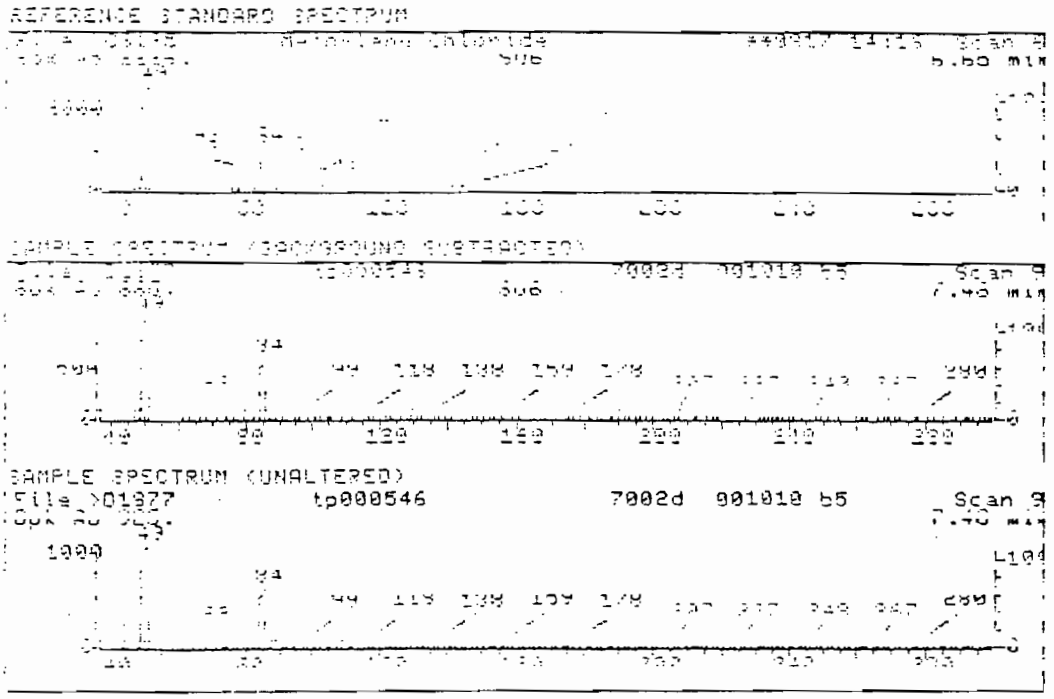
QUANT REPORT Page 1

Operator ID: MARIE Quant Rev: 7 Quant Time: 001016 16:21
Output File: >D1877::09 Injected at: **1016 15:37
Data File: >D1877::D4 Dilution Factor: 1.00000
Name: >0000746 Instrument ID: 7000 D
Misc: 7L 5g 5010A 5F

ID File: D0691::MT
Title: HP WOA Continuing Calibration Standard
Last Calibration: 100416 12:39 Last Qual Time: **1014 11:41

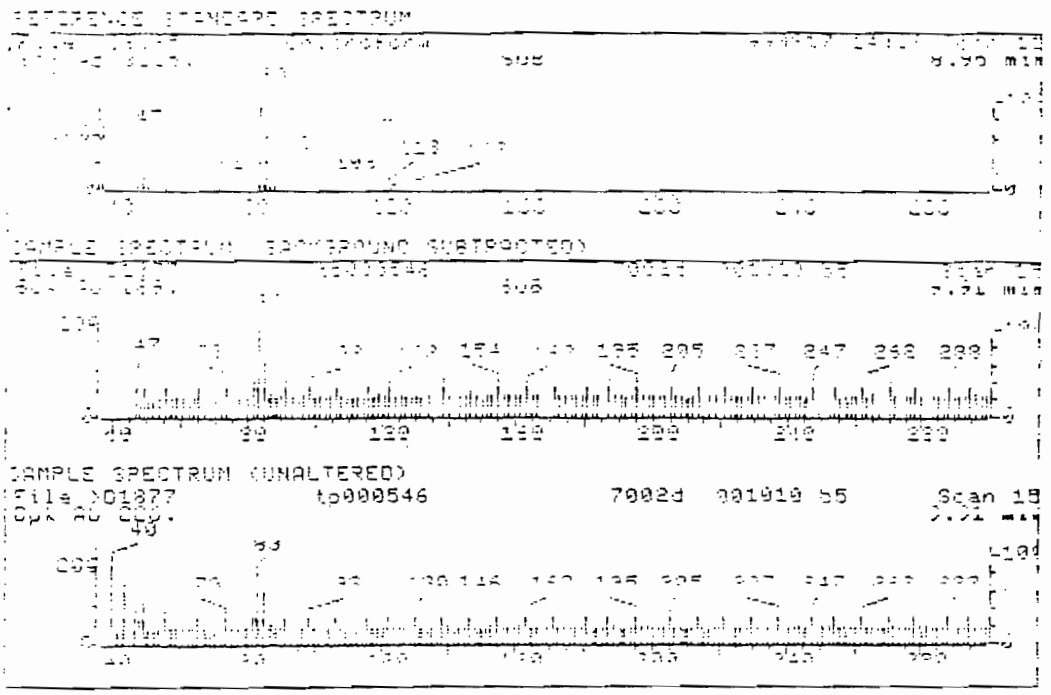
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.18	128.0	12568	50.00	UG	91
6)	Methylene Chloride	7.48	84.0	14146	26.81	UG	61
18)	Chloroform	9.91	83.0	4172	3.20	UG	82
19)	1,2-Dichloroethane-d4	11.05	65.0	41725	44.52	UG	100
22)	*1,4-Difluorobenzene	11.60	114.0	67852	50.00	UG	94
36)	*Chlorobenzene-d5	17.32	117.0	55034	50.00	UG	97
42)	Toluene d-8	14.39	98.0	96896	46.62	UG	94
48)	Bromofluorobenzene	19.70	95.0	31601	49.08	UG	51

* Compound is ISTD



Data File: D1877::D6 Quant Output File: ^D1877::SS
Name: tp000546 Instrument ID: 7002 D
Misc: 7002d 001010 b5
Quant Time: 001016 16:21 Quant ID File: IDSS91::MT
Injected at: **1016 15:37 Last Calibration: 000616 12:38
Last Qual Time: **1016 11:41

Compound No : 6
Compound Name : Methylene Chloride
Scan Number : 99
Retention Time: 7.48 min.
Quant Ion : 84.0
Area : 14146
Concentration : 26.81 UG
q-value : 61



Data File: >D1877::D6
Name: tp000546
Misc: 7002d 001010 b5
Quant Time: 001016 16:21
Injected at: **1016 15:37
Last Qual Time: **1016 11:41

Quant Output File: ^D1877::SS
Instrument ID: 7002 D

Quant ID File: IDSS91::MT
Last Calibration: 000616 12:38

Compound No : 18
Compound Name : Chloroform
Scan Number : 152
Retention Time: 9.91 min.
Quant Ion : 83.0
Area : 4172
Concentration : 3.20 UG
q-value : 82

STANDARDS

DATA

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

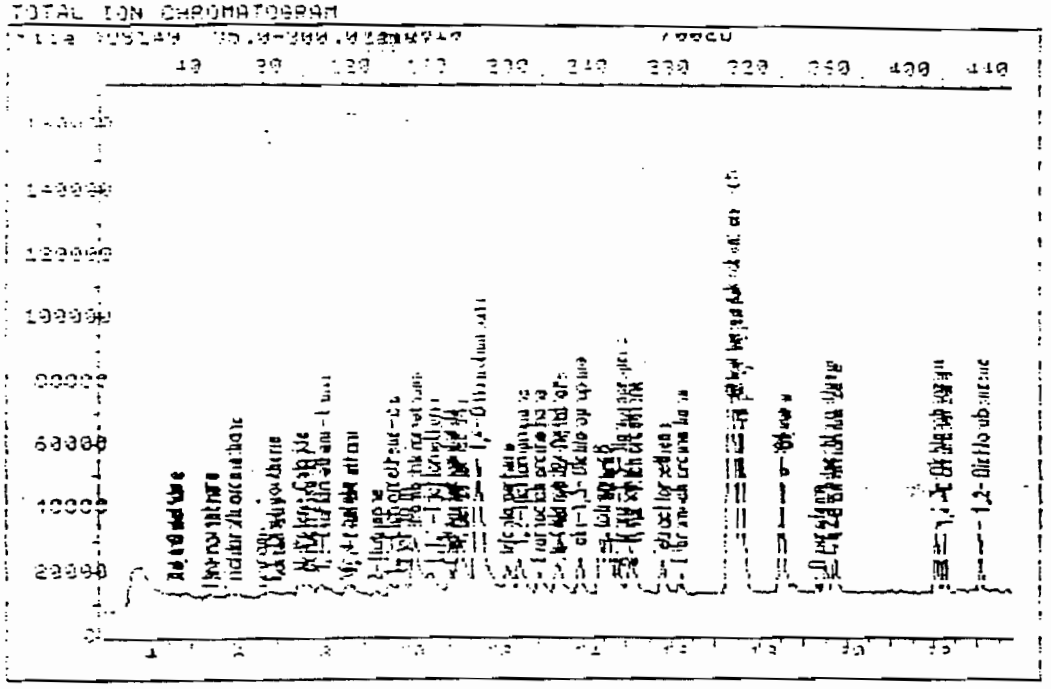
Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Instrument ID: H5970 D Calibration Date(s): 10/12/00 10/12/00
Heated Purge: (Y/N) Y Calibration Times: 14:15 16:13
GC Column: RTX502.2 ID: .32 (mm)

LAB FILE ID: RRF010= DS149 RRF020= DS150
RRF050= DS151 RRF100= DS152 RRF200= DS153

COMPOUND	RRF010	RRF020	RRF050	RRF100	RRF200	$\overline{RRF}$	% RSD
Chloromethane	1.481	1.608	1.214	1.020	.846	1.234	25.5
Bromomethane *	.683	.755	.728	.710	.501	.675	15.0*
Vinyl Chloride *	1.706	1.489	1.229	1.222	1.104	1.350	18.1*
Chloroethane	1.092	.945	1.034	.773	.833	.935	14.3
Methylene Chloride	2.255	1.978	1.716	2.180	1.796	1.985	11.8
Acetone	1.364	.873	.848	.838	.797	.944	25.0
Carbon Disulfide	6.086	5.465	4.845	4.774	4.425	5.119	12.8
1,1-Dichloroethene *	1.124	1.261	1.167	1.173	1.011	1.147	8.0*
1,1-Dichloroethane *	5.898	5.446	4.876	4.708	4.300	5.046	12.5*
1,2-Dichloroethene-trans	1.935	2.317	1.783	1.757	1.684	1.895	13.3
ıloroform *	6.347	5.501	4.817	4.907	4.317	5.178	15.0*
,2-Dichloroethane *	5.504	5.098	5.798	5.096	4.651	5.229	8.4*
-Butanone	3.053	2.141	2.694	2.474	2.594	2.591	12.8
1,1,1-Trichloroethane *	.762	.656	.666	.643	.618	.669	8.2*
Carbon Tetrachloride *	.509	.564	.532	.494	.479	.516	6.5*
Bromodichloromethane *	.826	.721	.697	.673	.647	.713	9.7*
1,2-Dichloropropane	.767	.646	.635	.624	.605	.655	9.8
cis-1,3-Dichloropropene *	.998	.868	.886	.845	.849	.889	7.1*
Trichloroethene *	.518	.437	.369	.335	.330	.398	20.0*
Dibromochloromethane *	.478	.420	.345	.317	.318	.376	18.9*
1,1,2-Trichloroethane *	.426	.381	.392	.357	.340	.379	8.7*
Benzene *	2.288	2.141	2.003	1.915	1.821	2.034	9.1*
trans-1,3-Dichloropropene *	.889	.806	.766	.738	.723	.784	8.5*
Bromoform *	.213	.173	.160	.141	.135	.165	18.9*
4-Methyl-2-Pentanone	1.401	1.369	1.322	1.014	1.250	1.271	12.2
2-Hexanone	.633	.564	.576	.520	.504	.559	9.1
Tetrachloroethene *	.304	.233	.261	.250	.240	.258	10.9*
1,1,2,2-Tetrachloroethane *	.672	.532	.523	.493	.485	.541	14.0*
Toluene *	2.249	2.113	2.118	2.074	2.005	2.112	4.2*
Chlorobenzene *	1.327	1.172	1.110	1.052	.965	1.125	12.1*
Ethylbenzene *	.661	.554	.548	.518	.486	.553	11.9*
Styrene *	1.405	1.326	1.272	1.185	1.153	1.268	8.1*
Toluene d-8	1.592	1.577	1.539	1.552	1.515	1.555	2.0
Bromofluorobenzene *	.523	.523	.485	.507	.475	.503	4.3*
1,2-Dichloroethane-d4	4.615	3.700	3.633	3.570	3.361	3.776	12.9
1,2-Dichloroethene-cis	4.777	4.489	4.212	4.222	3.988	4.337	7.0
m,p-Xylenes	.845	.837	.781	.742	.673	.776	9.2
o-Xylene *	.848	.730	.765	.708	.646	.740	10.1*

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of .010.

TOTAL ION CHROMATOGRAM



Data File: >DS149::05 Quant Output File: ^DS149::SS
Name: VSTD010 Instrument ID: 7002 D
Misc: 70020

Id File: IDSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000920 14:57 Last Qcal Time: <none>

Operator ID: MANAGER
Quant Time : 001012 14:39
Injected at: **1012 14:15

QUAN REPORT

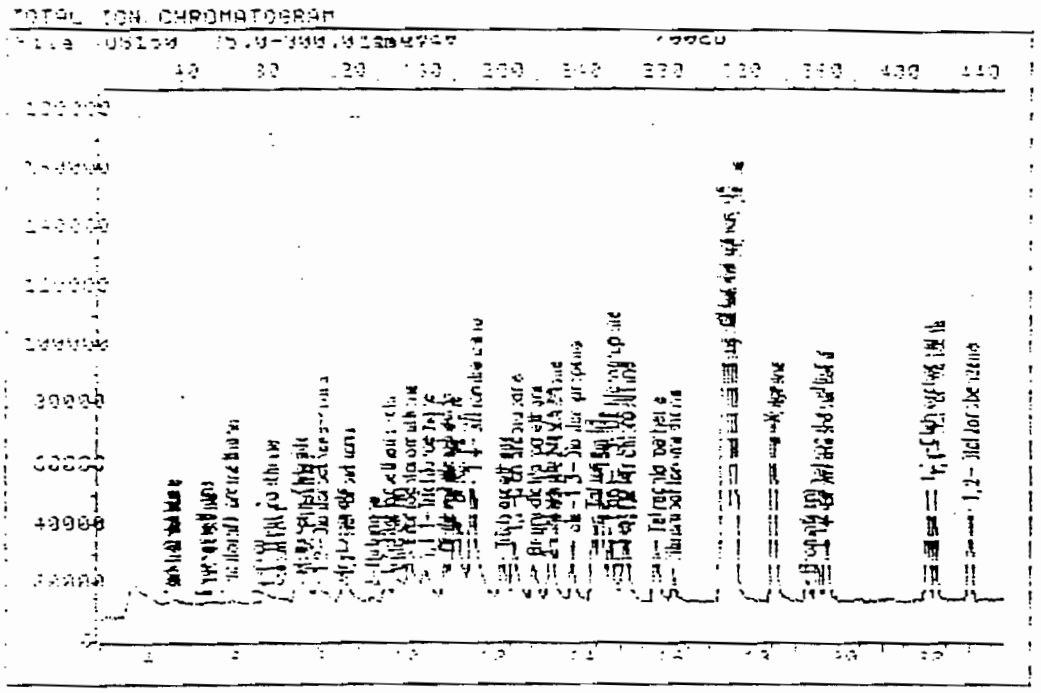
Operator ID: MANAGER Quant Rev: 7 Quant Time: 001012 14:59
Output File: ^DS149::SS Injected at: **1012 14:15
Data File: >DS149::D5 Dilution Factor: 1.0000
Name: VSTD010 Instrument ID: 7002 D
Misc: 7002D

ID File: IDSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000920 14:57 Last Qcal Date: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.15	128.0	23740	50.00	UG	8
2)	Chloromethane	4.62	50.0	7033M	17.42	UG	7
3)	Bromomethane	5.39	94.0	3243M	10.83	UG	9
4)	Vinyl Chloride	4.62	62.0	8101M	25.91	UG	8
5)	Chloroethane	5.44	64.0	5186M	11.04	UG	7
6)	Methylene Chloride	7.50	84.0	10709M	10.07	UG	5
8)	Acetone	6.54	43.0	6476M	11.14	UG	10
11)	Trichlorofluoromethane	5.94	101.0	8290M	12.02	UG	7
12)	Acetonitrile	6.99	41.0	2645M	26.99	UG	7
13)	Carbon Disulfide	7.68	76.0	28894	13.08	UG	10
14)	1,1-Dichloroethene	6.86	96.0	5335M	9.98	UG	7
15)	1,1-Dichloroethane	8.64	63.0	28005	11.67	UG	9
16)	1,2-Dichloroethene-trans	8.00	96.0	9188	10.50	UG	8
17)	1,2-Dichloroethene-cis	9.60	61.0	22680	10.47	UG	7
18)	Chloroform	9.88	83.0	30135	13.98	UG	9
19)	1,2-Dichloroethane-d4	11.02	65.0	21912	12.77	UG	10
20)	1,2-Dichloroethane	11.20	62.0	26131	11.51	UG	9
21)	2-Butanone	9.24	43.0	14497M	7.79	UG	7
22)	*1,4-Difluorobenzene	11.61	114.0	146331	50.00	UG	9
23)	1,1,1-Trichloroethane	10.56	97.0	22304	15.08	UG	8
24)	Carbon Tetrachloride	10.97	117.0	14898	12.84	UG	9
25)	Vinyl Acetate	8.55	43.0	32754	9.01	UG	7
26)	Bromodichloromethane	12.99	83.0	24161	14.31	UG	8
27)	1,2-Dichloropropane	12.57	63.0	22457	12.35	UG	8
28)	cis-1,3-Dichloropropene	13.90	75.0	29194	12.63	UG	8
29)	Trichloroethene	12.25	130.0	15150M	17.04	UG	9
30)	Dibromochloromethane	16.19	129.0	14002M	16.85	UG	9
31)	1,1,2-Trichloroethane	15.13	97.0	12458M	12.53	UG	9
32)	Benzene	11.25	78.0	66955	12.79	UG	6
33)	trans-1,3-Dichloropropene	14.81	75.0	26019	13.15	UG	9
34)	2-Chloroethylvinylether	13.40	63.0	11094M	10.91	UG	8
35)	Bromoform	19.30	173.0	6237	16.19	UG	9
36)	*Chlorobenzene-d5	17.33	117.0	140046	50.00	UG	9
37)	2-Hexanone	15.04	43.0	17730	11.34	UG	6
38)	4-Methyl-2-Pentanone	13.44	43.0	39240	10.69	UG	7
39)	Tetrachloroethene	15.78	164.0	8525M	13.97	UG	9
40)	1,1,2,2-Tetrachloroethane	19.53	83.0	18817	14.14	UG	9
41)	Toluene	14.54	91.0	62987	12.51	UG	9
42)	Toluene-d8	14.40	98.0	44602	11.65	UG	9

45)	Styrene	18.92	104.0	[illegible]	[illegible]	UG
46)	m,p-Xylenes	17.56	106.0	47348M	26.87	UG
47)	o-Xylene	18.47	106.0	23752	14.16	UG
48)	Bromofluorobenzene	19.71	95.0	14656	11.60	UG
49)	1,3-Dichlorobenzene	22.04	146.0	19652	13.33	UG
50)	1,4-Dichlorobenzene	22.22	146.0	18350	12.33	UG
51)	1,2-Dichlorobenzene	23.05	146.0	20116	14.10	UG

* Compound is ISTD



Data File: ^DS150::05 Quant Output File: ^DS150::SS
Name: VSTD020 Instrument ID: 7002 D
Misc: 70020

Id File: [DSC01::]MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000920 14:57 Last Qcal Time: <none>

Operator ID: MANAGER
Quant Time : 001012 15:09
Injected at: **1012 14:44

QUAN REPORT

Operator ID: MANAGER
Output File: ^DS150::SS
Data File: >DS150::D5
Name: VSTD020
Misc: 7002D

Quant Rev: 7 Quant Time: 001012 15:09
Injected at: **1012 14:44
Dilution Factor: 1.00000
Instrument ID: 7002 D

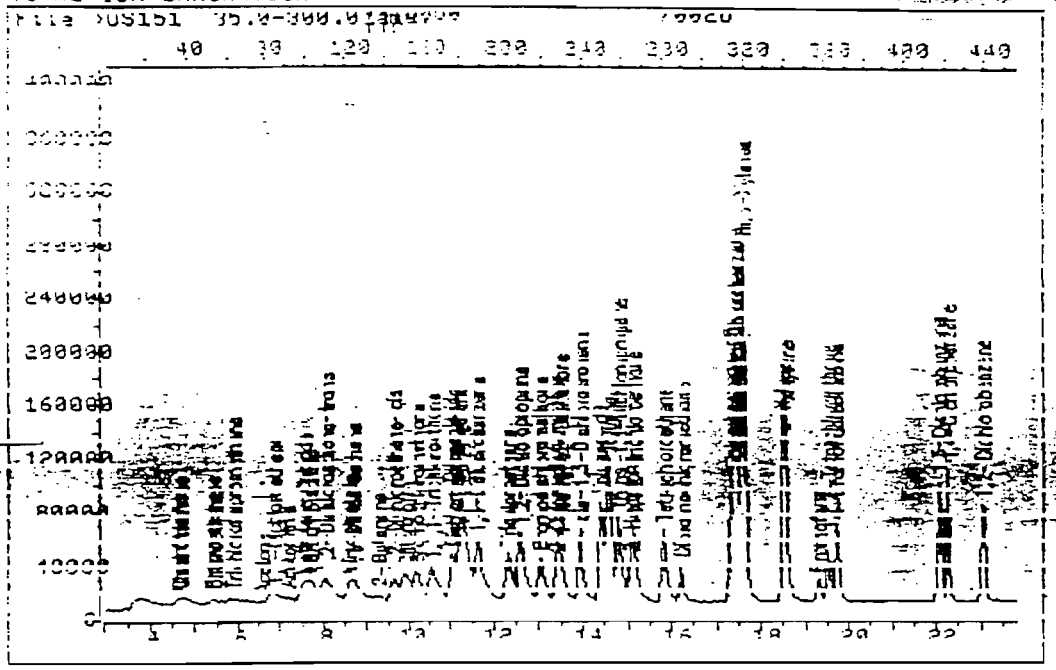
ID File: 10SC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000920 14:57 Last Qcal Date: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.13	128.0	22631	50.00	UG	9
2)	Chloromethane	4.60	50.0	14558M	37.83	UG	9
3)	Bromomethane	5.33	94.0	6837M	23.95	UG	8
4)	Vinyl Chloride	4.60	62.0	13483M	45.23	UG	7
5)	Chloroethane	5.42	64.0	8552	19.09	UG	8
6)	Methylene Chloride	7.53	84.0	17908M	17.66	UG	5
8)	Acetone	6.52	43.0	7899M	14.26	UG	10
11)	Trichlorofluoromethane	5.92	101.0	15026M	22.86	UG	9
12)	Acetonitrile	7.07	41.0	1720M	18.41	UG	
13)	Carbon Disulfide	7.66	76.0	49468	23.49	UG	
14)	1,1-Dichloroethene	6.84	96.0	11418M	22.40	UG	8
15)	1,1-Dichloroethane	8.67	63.0	49296	21.55	UG	9
16)	1,2-Dichloroethene-trans	8.03	96.0	20974	25.14	UG	8
17)	1,2-Dichloroethene-cis	9.63	61.0	40637	19.67	UG	7
18)	Chloroform	9.86	83.0	49795	24.23	UG	8
19)	1,2-Dichloroethane-d4	11.05	65.0	33491	20.47	UG	10
20)	1,2-Dichloroethane	11.18	62.0	46147	21.32	UG	9
21)	2-Butanone	9.26	43.0	19385M	10.93	UG	8
22)	*1,4-Difluorobenzene	11.64	114.0	140460	50.00	UG	9
23)	1,1,1-Trichloroethane	10.54	97.0	36883	25.98	UG	9
24)	Carbon Tetrachloride	11.00	117.0	31663	28.44	UG	9
25)	Vinyl Acetate	8.53	43.0	54557	15.64	UG	7
26)	Bromodichloromethane	13.01	83.0	40499	24.98	UG	9
27)	1,2-Dichloropropane	12.56	63.0	36294	20.80	UG	9
28)	cis-1,3-Dichloropropene	13.93	75.0	48793	21.99	UG	7
29)	Trichloroethene	12.28	130.0	24534M	28.75	UG	9
30)	Dibromochloromethane	16.17	129.0	23604M	29.59	UG	9
31)	1,1,2-Trichloroethane	15.12	97.0	21408M	22.43	UG	8
32)	Benzene	11.28	78.0	120291	23.95	UG	
33)	trans-1,3-Dichloropropene	14.80	75.0	45287	23.84	UG	
34)	2-Chloroethylvinylether	13.38	63.0	20501M	21.00	UG	
35)	Bromoform	19.28	173.0	9746	26.36	UG	
36)	*Chlorobenzene-d5	17.31	117.0	132713	50.00	UG	
37)	2-Hexanone	15.03	43.0	29919	20.19	UG	
38)	4-Methyl-2-Pentanone	13.47	43.0	72682	20.88	UG	
39)	Tetrachloroethene	15.80	164.0	12372M	21.40	UG	
40)	1,1,2,2-Tetrachloroethane	19.51	83.0	28222	22.38	UG	
41)	Toluene	14.57	91.0	112168	23.52	UG	
42)	Toluene d-8	14.39	98.0	83728	23.08	UG	
43)	Chlorobenzene	17.41	112.0	62239	25.12	UG	

47)	o-Xylene	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
48)	Bromofluorobenzene	19.69	95.0	27746	23.17	UG	5
49)	1,3-Dichlorobenzene	22.02	146.0	34967	25.02	UG	9
50)	1,4-Dichlorobenzene	22.25	146.0	32851	23.29	UG	7
51)	1,2-Dichlorobenzene	23.03	146.0	33803	25.01	UG	9

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >DS151::D5 Quant Output File: ^DS151::SS
Name: VSTD050 Instrument ID: 7002 D
Misc: 7002D

Id File: IDSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000920 14:57 Last Qcal Time: <none>

Operator ID: MANAGER
Quant Time : 001012 15:38
Initiated at: 001012 15:14

QUANT REPORT

Operator ID: MANAGER
Output File: ^DS151::SS
Data File: >DS151::D5
Name: VSTD050
Misc: 7002D

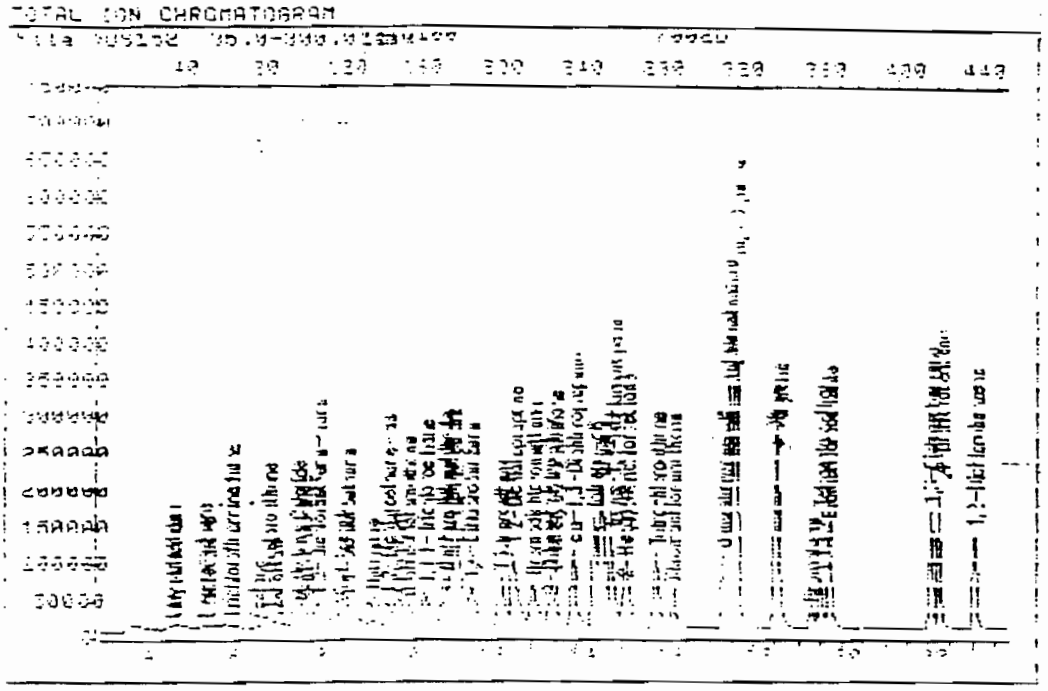
Quant Rev: 7 Quant Time: 001012 15:38
Injected at: **1012 15:14
Dilution Factor: 1.00000
Instrument ID: 7002 D

ID File: IDSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000920 14:57 Last Qcal Date: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.18	128.0	23506	50.00	UG	9
2)	Chloromethane	4.64	50.0	28535M	71.40	UG	
3)	Bromomethane	5.38	94.0	17107M	57.69	UG	8
4)	Vinyl Chloride	4.64	62.0	28899M	93.34	UG	
5)	Chloroethane	5.42	64.0	24295M	52.22	UG	8
6)	Methylene Chloride	7.53	84.0	40348M	38.31	UG	4
8)	Acetone	6.56	43.0	19938	34.65	UG	10
11)	Trichlorofluoromethane	5.88	101.0	37268M	54.59	UG	8
12)	Acetonitrile	7.16	41.0	2316M	23.86	UG	4
13)	Carbon Disulfide	7.66	76.0	113897	52.07	UG	1
14)	1,1-Dichloroethene	6.84	96.0	27429	51.80	UG	7
15)	1,1-Dichloroethane	8.67	63.0	114612	48.25	UG	9
16)	1,2-Dichloroethene-trans	8.03	96.0	41906	48.35	UG	8
17)	1,2-Dichloroethene-cis	9.63	61.0	99004	46.15	UG	7
18)	Chloroform	9.90	83.0	113239	53.06	UG	9
19)	1,2-Dichloroethane-d4	11.05	65.0	85400	50.25	UG	1
20)	1,2-Dichloroethane	11.18	62.0	136284	60.63	UG	9
21)	2-Butanone	9.26	43.0	63332	34.39	UG	6
22)	*1,4-Difluorobenzene	11.60	114.0	144341	50.00	UG	9
23)	1,1,1-Trichloroethane	10.54	97.0	96191	65.94	UG	
24)	Carbon Tetrachloride	11.00	117.0	76821	67.14	UG	9
25)	Vinyl Acetate	8.58	43.0	141110	39.37	UG	6
26)	Bromodichloromethane	13.01	83.0	100570	60.37	UG	8
27)	1,2-Dichloropropane	12.56	63.0	91715	51.14	UG	9
28)	cis-1,3-Dichloropropene	13.93	75.0	127906	56.10	UG	8
29)	Trichloroethene	12.28	130.0	53238	60.72	UG	8
30)	Dibromochloromethane	16.22	129.0	49751	60.70	UG	9
31)	1,1,2-Trichloroethane	15.12	97.0	56588	57.68	UG	9
32)	Benzene	11.28	78.0	289136	56.01	UG	9
33)	trans-1,3-Dichloropropene	14.80	75.0	110545	56.64	UG	9
34)	2-Chloroethylvinylether	13.38	63.0	55762	55.59	UG	9
35)	Bromoform	19.28	173.0	23100	60.80	UG	9
36)	*Chlorobenzene-d5	17.31	117.0	131588	50.00	UG	9
37)	2-Hexanone	15.07	43.0	75786	51.58	UG	
38)	4-Methyl-2-Pentanone	13.47	43.0	174025	50.43	UG	
39)	Tetrachloroethene	15.80	164.0	34351	59.91	UG	
40)	1,1,2,2-Tetrachloroethane	19.51	83.0	68775	55.01	UG	
41)	Toluene	14.57	91.0	278757	58.94	UG	
42)	Toluene d-8	14.39	98.0	202524	56.31	UG	
43)	Chlorobenzene	17.40	112.0	146068	59.45	UG	
		17.45	126.0	72101	54.32	UG	

47)	o-Xylene						
48)	Bromofluorobenzene	19.69	95.0	63843	53.77	UG	
49)	1,3-Dichlorobenzene	22.02	146.0	82314	59.40	UG	
50)	1,4-Dichlorobenzene	22.25	146.0	82067	58.67	UG	
51)	1,2-Dichlorobenzene	23.03	146.0	75947	56.67	UG	

* Compound is ISTD



Data File: DS152::D5 Quant Output File: ^DS152::SS
Name: VSTD100 Instrument ID: 7002 D
Misc: 7002D

Id File: IDSC91::MT
Title: HP V0A Continuing Calibration Standard
Last Calibration: 000920 14:57 Last Qcal Time: <none>

Operator ID: MANAGER
Quant Time : 001012 16:08
Injected at: **1012 15:44

QUANT REPORT

Operator ID: MANAGER
Output File: ^DS152::SS
Data File: >DS152::D5
Name: VSTD100
Misc: 7002D

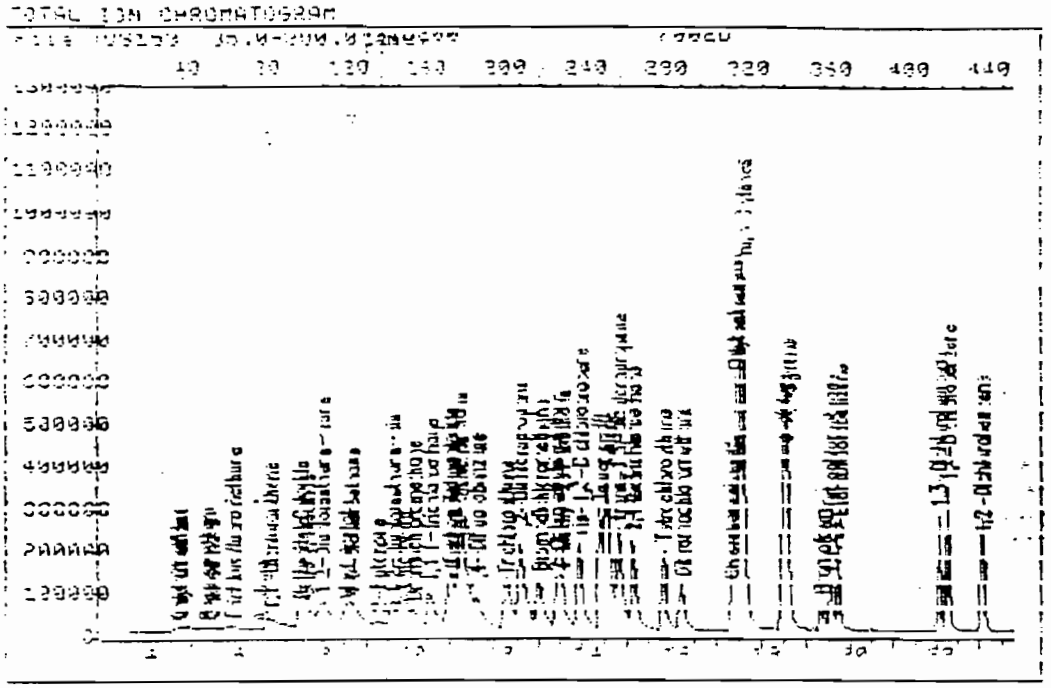
Quant Rev: 7
Quant Time: 001012 16:08
Injected at: **1012 15:44
Dilution Factor: 1.00000
Instrument ID: 7002 D

ID File: IDSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000920 14:57
Last Ucal Date: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.13	128.0	22997	50.00	UG	9
2)	Chloromethane	4.64	50.0	46921	120.00	UG	2
3)	Bromomethane	5.33	94.0	32652M	112.56	UG	9
4)	Vinyl Chloride	4.64	62.0	56205	185.56	UG	8
5)	Chloroethane	5.42	64.0	35567M	78.14	UG	7
6)	Methylene Chloride	7.53	84.0	100254	97.29	UG	4
8)	Acetone	6.57	43.0	38547	68.48	UG	10
11)	Trichlorofluoromethane	5.97	101.0	82301	123.22	UG	8
12)	Acetonitrile	7.02	41.0	1350	14.22	UG	9
13)	Carbon Disulfide	7.66	76.0	219598	102.61	UG	11
14)	1,1-Dichloroethene	6.84	96.0	53956	104.15	UG	7
15)	1,1-Dichloroethane	8.67	63.0	216542	93.17	UG	9
16)	1,2-Dichloroethene-trans	7.98	96.0	80810	95.31	UG	8
17)	1,2-Dichloroethene-cis	9.63	61.0	194176	92.51	UG	7
18)	Chloroform	9.90	83.0	225703	108.10	UG	9
19)	1,2-Dichloroethane-d4	11.05	65.0	164202	98.76	UG	11
20)	1,2-Dichloroethane	11.19	62.0	234382	106.57	UG	9
21)	2-Butanone	9.26	43.0	113789	63.15	UG	7
22)	*1,4-Difluorobenzene	11.60	114.0	144032	50.00	UG	9
23)	1,1,1-Trichloroethane	10.55	97.0	185116	127.18	UG	8
24)	Carbon Tetrachloride	11.00	117.0	142418	124.74	UG	9
25)	Vinyl Acetate	8.53	43.0	265393	74.21	UG	8
26)	Bromodichloromethane	13.02	83.0	193763	116.56	UG	9
27)	1,2-Dichloropropane	12.56	63.0	179637	100.38	UG	9
28)	cis-1,3-Dichloropropene	13.93	75.0	243327	106.95	UG	8
29)	Trichloroethene	12.28	130.0	96608	110.41	UG	9
30)	Dibromochloromethane	16.17	129.0	91401	111.75	UG	9
31)	1,1,2-Trichloroethane	15.12	97.0	102959	105.18	UG	9
32)	Benzene	11.28	78.0	551665	107.09	UG	9
33)	trans-1,3-Dichloropropene	14.80	75.0	212608	109.16	UG	9
34)	2-Chloroethylvinylether	13.38	63.0	53698	53.65	UG	9
35)	Bromoform	19.28	173.0	40679	107.30	UG	9
36)	*Chlorobenzene-d5	17.32	117.0	128938	50.00	UG	9
37)	2-Hexanone	15.07	43.0	134036	93.10	UG	8
38)	4-Methyl-2-Pentanone	13.47	43.0	261470	77.33	UG	7
39)	Tetrachloroethene	15.81	164.0	64432	114.69	UG	9
40)	1,1,2,2-Tetrachloroethane	19.51	83.0	127105	103.75	UG	9
41)	Toluene	14.57	91.0	534722	115.39	UG	9
42)	Toluene d-8	14.39	98.0	400249	113.58	UG	9
43)	Chlorobenzene	17.41	112.0	271292	112.69	UG	9
44)	Ethylbenzene	17.45	106.0	133641	102.75	UG	8

48)	Bromofluorobenzene	19.69	95.0	130702	112.35	UG
49)	1,3-Dichlorobenzene	22.03	146.0	146055	107.57	UG
50)	1,4-Dichlorobenzene	22.26	146.0	145021	105.81	UG
51)	1,2-Dichlorobenzene	23.03	146.0	132270	100.73	UG

* Compound is ISTD



Data File: ^DS153::05 Quant Outout File: ^DS153::SS
Name: VST0200 Instrument ID: 7002 D
Misc: 70020

Id File: IDSCP1::MT
Title: HP 10A Continuing Calibration Standard
Last Calibration: 000920 14:57 Last Qcal Time: <none>

Operator ID: MANAGER
Quant Time : 001012 16:38
Injected at: **1012 16:13

QUANT REPORT

Operator ID: MANAGER
Output File: ^DS153::SS
Data File: >DS153::D5
Name: VSTD200
Misc: 7002D

Quant Rev: 7
Quant Time: 001012 16:38
Injected at: **1012 16:13
Dilution Factor: 1.00000
Instrument ID: 7002 D

ID File: IDSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000920 14:57
Last Qcal Date: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	c
1)	*Bromochloromethane	10.13	128.0	24472	50.00	UG	9
2)	Chloromethane	4.69	50.0	82850M	199.11	UG	8
3)	Bromomethane	5.33	94.0	48999M	158.73	UG	8
4)	Vinyl Chloride	4.69	62.0	108095	335.37	UG	9
5)	Chloroethane	5.42	64.0	81550M	168.37	UG	8
6)	Methylene Chloride	7.48	84.0	175774	160.29	UG	4
8)	Acetone	6.57	43.0	77996	130.21	UG	10
11)	Trichlorofluoromethane	5.93	101.0	137087	192.88	UG	9
12)	Acetonitrile	7.48	41.0	14286	141.39	UG	3
13)	Carbon Disulfide	7.62	76.0	433114	190.18	UG	10
14)	1,1-Dichloroethene	6.79	96.0	98924	179.45	UG	7
15)	1,1-Dichloroethane	8.67	63.0	420892	170.19	UG	9
16)	1,2-Dichloroethene-trans	7.98	96.0	164857	182.72	UG	8
17)	1,2-Dichloroethene-cis	9.63	61.0	390364	174.77	UG	7
18)	Chloroform	9.86	83.0	422587	190.20	UG	9
19)	1,2-Dichloroethane-d4	11.05	65.0	329050	185.98	UG	1(
20)	1,2-Dichloroethane	11.19	62.0	455236	194.52	UG	9
21)	2-Butanone	9.27	43.0	253882	132.40	UG	7
22)	*1,4-Difluorobenzene	11.60	114.0	145504	50.00	UG	9
23)	1,1,1-Trichloroethane	10.55	97.0	359871	244.74	UG	8
24)	Carbon Tetrachloride	11.00	117.0	278554	241.51	UG	9
25)	Vinyl Acetate	8.53	43.0	559984	155.00	UG	8
26)	Bromodichloromethane	13.02	83.0	376628	224.26	UG	8
27)	1,2-Dichloropropane	12.56	63.0	351916	194.65	UG	9
28)	cis-1,3-Dichloropropene	13.93	75.0	494020	214.95	UG	7
29)	Trichloroethene	12.24	130.0	191964	217.18	UG	8
30)	Dibromochloromethane	16.22	129.0	185225	224.18	UG	9
31)	1,1,2-Trichloroethane	15.12	97.0	197629	199.84	UG	9
32)	Benzene	11.23	78.0	1059898	203.67	UG	1
33)	trans-1,3-Dichloropropene	14.80	75.0	420582	213.75	UG	8
34)	2-Chloroethylvinylether	13.38	63.0	234586	232.01	UG	8
35)	Bromoform	19.33	173.0	78505	204.98	UG	8
36)	*Chlorobenzene-d5	17.32	117.0	125695	50.00	UG	9
37)	2-Hexanone	15.12	43.0	253434	180.57	UG	1
38)	4-Methyl-2-Pentanone	13.52	43.0	628315	190.62	UG	9
39)	Tetrachloroethene	15.81	164.0	120540	220.10	UG	8
40)	1,1,2,2-Tetrachloroethane	19.51	83.0	243622	203.98	UG	8
41)	Toluene	14.57	91.0	1007950	223.12	UG	8
42)	Toluene d-8	14.39	98.0	761722	221.73	UG	8
43)	Chlorobenzene	17.41	112.0	485192	206.73	UG	8
44)	Ethylbenzene	17.45	106.0	244218	192.61	UG	8

48)	Bromofluorobenzene	19.74	95.0	238888	210.65	UG
49)	1,3-Dichlorobenzene	22.03	146.0	260662	196.92	UG
50)	1,4-Dichlorobenzene	22.26	146.0	265188	198.48	UG
51)	1,2-Dichlorobenzene	23.04	146.0	244994	191.39	UG

* Compound is ISTD

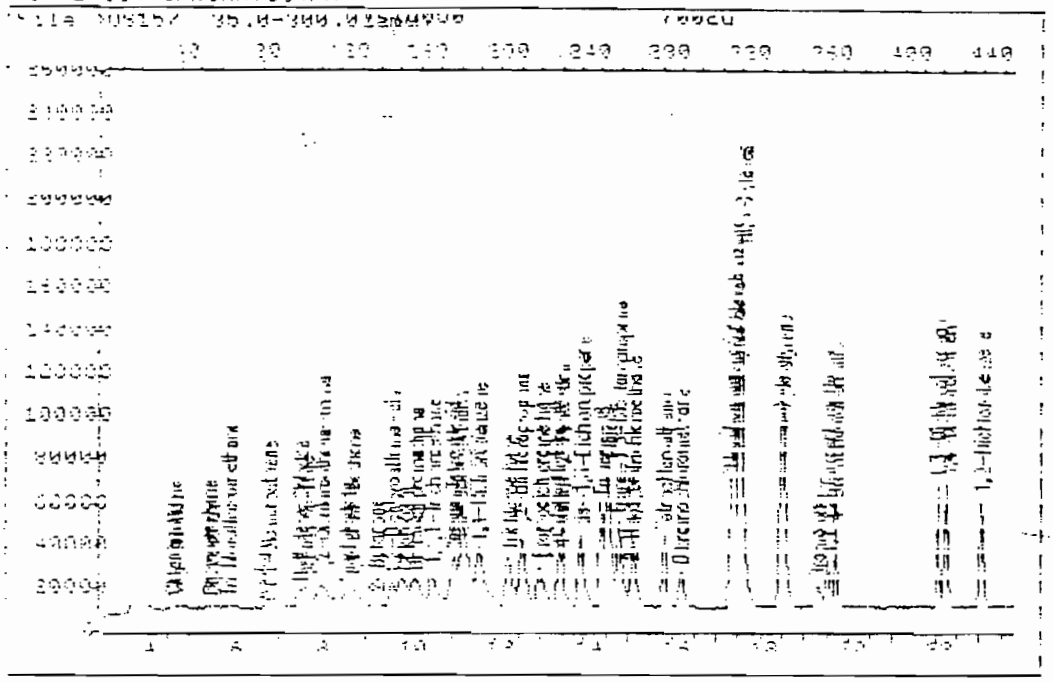
7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Instrument ID: H5970 D Calibration Date: 10/16/00 Time: 11:41
Lab File ID: DS157 Init. Calib. Date(s): 10/12/00 10/12/00
Heated Purge: (Y/N) Y Init. Calib. Times: 14:15 16:13
GC Column: RTX502.2 ID: .32 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chloromethane	1.234	1.435		-16.3	
Bromomethane	.675	.761	.100	-12.7	25.0
Vinyl Chloride	1.350	1.382	.100	-2.4	25.0
Chloroethane	.935	1.173		-25.5	
Methylene Chloride	1.985	2.099		-5.7	
Acetone	.944	.904		4.2	
Carbon Disulfide	5.119	4.657		9.0	
1,1-Dichloroethene	1.147	1.408	.100	-22.8	25.0
1,1-Dichloroethane	5.046	4.766	.200	5.5	25.0
1,2-Dichloroethene-trans	1.895	1.760		7.1	
Chloroform	5.178	5.190	.200	-.2	25.0
1,2-Dichloroethane	5.229	4.537	.100	13.2	25.0
2-Butanone	2.591	2.435		6.0	
1,1,1-Trichloroethane	.669	.701	.100	-4.8	25.0
Carbon Tetrachloride	.516	.577	.100	-11.8	25.0
Bromodichloromethane	.713	.704	.200	1.3	25.0
1,2-Dichloropropane	.655	.672		-2.6	
cis-1,3-Dichloropropene	.889	.889	.200	.0	25.0
Trichloroethene	.398	.397	.300	.3	25.0
Dibromochloromethane	.376	.365	.100	2.9	25.0
1,1,2-Trichloroethane	.379	.401	.100	-5.8	25.0
Benzene	2.034	2.015	.500	.9	25.0
trans-1,3-Dichloropropene	.784	.768	.100	2.0	25.0
Bromoform	.165	.165	.100	.0	25.0
4-Methyl-2-Pentanone	1.271	1.209		4.9	
2-Hexanone	.559	.467		16.5	
Tetrachloroethene	.258	.297	.200	-15.1	25.0
1,1,2,2-Tetrachloroethane	.541	.504	.500	6.8	25.0
Toluene	2.112	2.190	.400	-3.7	25.0
Chlorobenzene	1.125	1.187	.500	-5.5	25.0
Ethylbenzene	.553	.582	.100	-5.2	25.0
Styrene	1.268	1.242	.300	2.1	25.0
Toluene d-8	1.555	1.598		-2.8	
Bromofluorobenzene	.503	.495	.200	1.6	25.0
1,2-Dichloroethane-d4	3.776	3.729		1.2	
1,2-Dichloroethene-cis	4.337	4.125		4.9	
m,p-Xylenes	.776	.817		-5.3	
o-Xylene	.740	.716	.010	3.2	25.0

All other compounds must meet a minimum RRF of .010.



Data File: ^DS157::06 Quant Output File: ^DS157::SS
Name: wstd050 Instrument ID: 7002 D
Misc: 7002d

Id File: IDSC91::MT
Title: HP MCA Continuing Calibration Standard
Last Calibration: 001016 13:39 Last Qcal Time: <none>

Operator ID: MARIE
Quant Time : 001016 13:40
Injected at: **1016 11:41

QUANT REPORT Page 1

Operator ID: MARIE Quant Rev: 7 Quant Time: 001016 13:40
Outfile File: D5157::33 Injected at: **1016 11:41
Data File: >D5157::04 Dilution Factor: 1.00000
Name: std0F0 Instrument ID: 7002 D
Misc: 70004

ID File: [D5C31::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 001016 13:30 Last Qual Time: (none)

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.18	128.0	15424	50.00	UG	97
2)	Chloromethane	4.60	50.0	22139	58.16	UG	86
3)	Bromomethane	5.42	94.0	11730	56.31	UG	75
4)	Vinyl Chloride	4.64	62.0	21322	51.19	UG	96
5)	Chloroethane	5.47	64.0	18088	62.69	UG	76
6)	Methylene Chloride	7.53	84.0	32375	52.87	UG	52
7)	Acetone	6.41	43.0	13937	47.84	UG	100
11)	Trichlorofluoromethane	5.89	101.0	29460	58.37	UG	95
12)	Carbon Disulfide	7.64	76.0	71833	45.49	UG	100
14)	1,1-Dichloroethene	6.79	96.0	21712	61.36	UG	75
15)	1,1-Dichloroethane	8.72	63.0	73510	47.23	UG	96
16)	1,2-Dichloroethene-trans	9.03	96.0	27141	46.42	UG	88
17)	1,2-Dichloroethene-cis	9.63	61.0	63617	47.55	UG	74
18)	Chloroform	9.90	83.0	80052	50.12	UG	99
19)	1,2-Dichloroethane-d4	11.05	65.0	57512	49.38	UG	100
20)	1,2-Dichloroethane	11.19	62.0	69981	43.39	UG	95
21)	2-Butanone	9.24	43.0	37558	46.99	UG	80
22)	*1,4-Difluorobenzene	11.60	114.0	91756	50.00	UG	93
23)	1,1,1-Trichloroethane	10.54	97.0	64286	52.35	UG	89
24)	Carbon Tetrachloride	11.00	117.0	52972	55.99	UG	95
25)	Vinyl Acetate	8.59	43.0	77005	42.37	UG	80
26)	Bromodichloromethane	13.02	83.0	64551	49.36	UG	93
27)	1,2-Dichloropropane	12.56	63.0	61681	51.28	UG	93
28)	cis-1,3-Dichloropropene	13.93	75.0	81587	50.00	UG	81
29)	Trichloroethene	12.28	130.0	36387	49.86	UG	87
30)	Dibromochloromethane	16.17	129.0	33493	48.57	UG	96
31)	1,1,2-Trichloroethane	15.12	97.0	36808	52.90	UG	95
32)	Benzene	11.28	78.0	184884	49.54	UG	56
33)	trans-1,3-Dichloropropene	14.80	75.0	70492	48.98	UG	92
34)	2-Chloroethylvinylether	13.38	63.0	34125	54.06	UG	92
35)	Bromoform	19.28	173.0	15168	50.23	UG	97
36)	*Chlorobenzene-d5	17.32	117.0	81984	50.00	UG	92
37)	2-Hexanone	15.07	43.0	38264	41.73	UG	69
38)	4-Methyl-2-Pentanone	13.47	43.0	99130	47.56	UG	74
39)	Tetrachloroethene	15.91	164.0	24341	57.62	UG	80
40)	1,1,2,2-Tetrachloroethane	18.51	83.0	41301	46.61	UG	95
41)	Toluene	14.67	91.0	179510	51.94	UG	90
42)	Toluene-d8	14.78	98.0	130994	51.37	UG	94
43)	Chlorobenzene	17.41	112.0	97337	52.75	UG	90
44)	Ethylbenzene	17.45	106.0	47713	52.59	UG	91

Operator ID: MARIE Quant Rev: 7 Quant Time: 001016 13:40
Data File: ^09167:09 Injected at: **1016 11:41
Data File: ^09167:04 Dilution Factor: 1.00000
Name: VAF80F1 Instrument ID: 7002 D
Misc: 7002c

ID File: 10809A1:MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 01101 13:39 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	c
45)	Styrene	18.51	104.0	101857	48.99	UG	9(
46)	m,p-Xylenes	17.59	106.0	133929M	105.29	UG	9?
47)	o-Xylene	18.46	106.0	58733	48.44	UG	9<
48)	Bromofluorobenzene	19.69	95.0	40582	49.24	UG	5<
49)	1,3-Dichlorobenzene	22.03	146.0	53517	53.15	UG	8?
50)	1,4-Dichlorobenzene	22.26	146.0	52057	53.14	UG	8(
51)	1,2-Dichlorobenzene	23.07	146.0	47019	48.90	UG	9?

* Compound is ISTD

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Lab File ID (Standard): DS157 Date Analyzed: 10/16/00
Instrument ID: H5970 D Time Analyzed: 11:41
GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) Y

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	15424.	10.18	91756.	11.60	81984.	17.32
	UPPER LIMIT	30848.	10.68	183512.	12.10	163968.	17.82
	LOWER LIMIT	7712.	9.68	45878.	11.10	40992.	16.82
	EPA SAMPLE NO.						
1	VBLK01	14983.	10.18	82211.	11.64	76952.	17.32
2	TP0001 24(3.5)	13711.	10.18	74464.	11.64	68643.	17.32
3	TP0003 24(3.5)	11964.	10.18	61198.	11.64	56888.	17.32
4	MW0824	12663.	10.15	69003.	11.62	64909.	17.29
5	MW081214	14544.	10.16	80294.	11.62	73522.	17.29
6	TP000468	14505.	10.18	74390.	11.60	70829.	17.32
7	TP000546	12568.	10.18	67852.	11.60	65034.	17.32
8	MW07610	11826.	10.18	71638.	11.60	65603.	17.32
9	MW0712125	11961.	10.18	74310.	11.64	70079.	17.32
0	MW0712125 MS	12110.	10.14	66257.	11.60	62509.	17.32
11	MW0712125 MSD	11630.	10.18	68454.	11.64	63758.	17.32
12	SMSB	13148.	10.18	76002.	11.60	70195.	17.32
13	MW09810	11198.	10.13	66177.	11.64	59330.	17.32
14	MW091418	11272.	10.16	68113.	11.62	64073.	17.29
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

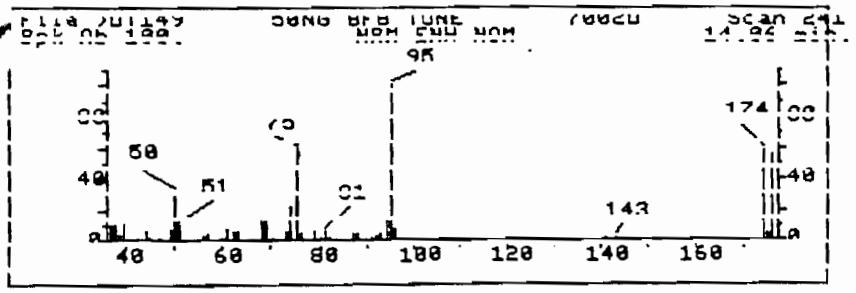
RAW QC

DATA

MS data file header from : >DT149::D5

Sample: 50NG BFB TUNE Operator: MANAGER SUPER GRP. 10/12/00 13:50
Misc : 7002D
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7002 D
Method file: METHOT Tuning file: MT900D No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	90.	230.	230.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0



>DT149 50NG BFB TUNE 7002D
241 NRM ENH NOM

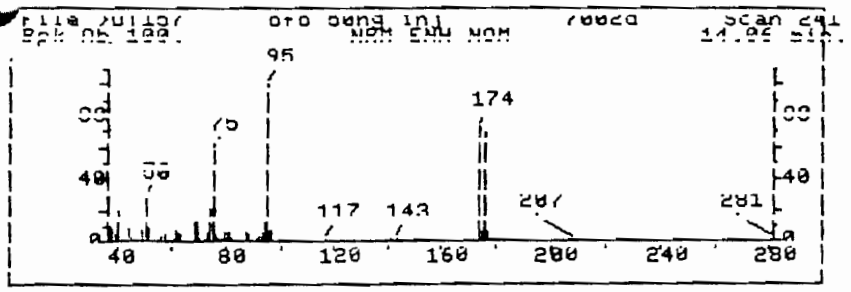
File: >DT149 Scan #: 241 Retn. time: 14.06

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.00	2.222	50.00	31.937	69.05	13.910	79.95	1.953	95.00	100.000
37.00	10.679	51.00	9.635	70.05	1.864	80.95	5.770	96.10	6.897
38.00	9.697	56.00	3.114	73.05	6.287	81.85	1.340	104.10	1.185
39.00	3.662	57.00	4.757	74.05	21.937	86.95	5.353	140.95	1.399
39.90	10.924	60.05	1.581	75.05	59.564	87.95	5.140	142.95	1.757
44.00	6.156	61.05	7.734	76.05	5.353	90.95	1.340	174.00	58.069
45.00	2.212	62.05	6.773	77.05	1.109	91.95	3.390	175.00	4.733
47.00	2.181	63.05	5.581	78.05	1.071	92.95	5.153	176.00	55.517
49.00	7.641	68.05	14.010	78.85	5.619	93.95	12.801	177.00	3.917

MS data file header from : >DT157::D6

Sample: bfb 50ng inj Operator: MARIE REG. GRP. 10/16/00 11:11
Misc : 7002d
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7002 D
Method file: METHDT Tuning file: MT900D No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	90.	230.	230.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0



>DT157 bfb 50ng ini 7002d
241 NRM ENH NOM

File: >DT157 Scan #: 241 Retn. time: 14.06

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.00	1.771	51.00	8.980	72.95	6.467	87.95	5.327	140.85	1.742
37.00	9.781	56.00	2.718	74.05	21.200	91.05	1.356	142.95	2.110
38.00	8.550	57.00	4.310	75.05	58.122	91.95	3.629	154.85	1.011
39.00	4.088	60.05	1.742	76.05	5.245	92.95	5.856	173.90	72.619
39.90	19.427	61.05	7.209	77.05	1.633	93.95	13.968	174.90	6.511
43.00	1.297	62.05	6.557	78.05	1.555	95.00	100.000	175.90	69.276
44.00	8.784	62.95	4.807	78.85	5.710	96.00	7.726	176.90	5.669
45.00	2.306	67.95	13.337	79.95	1.575	104.00	1.049	189.00	1.026
47.00	2.320	69.05	13.430	80.85	6.002	106.00	1.029	207.00	1.207
49.00	7.040	70.05	1.406	81.85	1.619	116.90	1.528	281.10	1.061
50.00	28.518	72.05	1.663	86.95	5.704				

1A

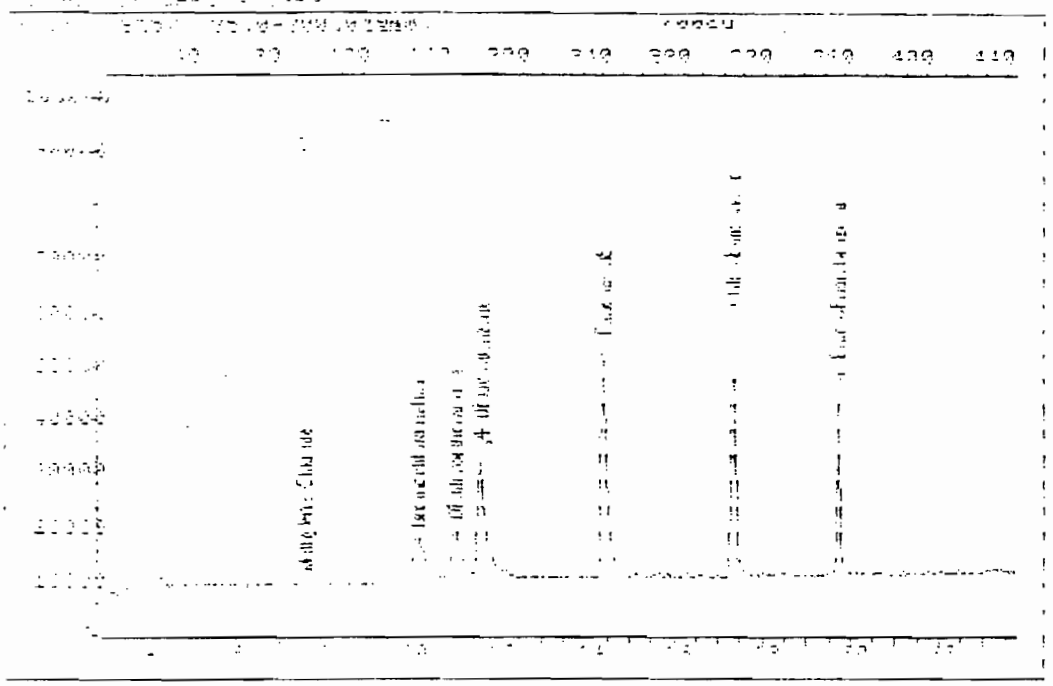
EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

VBLK01

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: VBLK
Sample wt/vol: 5.000 (g/mL) G Lab File ID: DB157
Level: (low/med) LOW Date Received:
% Moisture: not dec. 0. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	6.	J
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	1,2-Dichloroethene-trans	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon Tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	U
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
10061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
156-59-2	1,2-Dichloroethene-cis	10.	U
106-42-3	m,p-Xylenes	10.	U
95-47-6	o-Xylene	10.	U



Data File: ^08157::06 Quant Output File: ^08157::98
Name: ub1b Instrument ID: 7002 D
Misc: 70024

IM File: 10869A::MT
Title: 48 HCB Containing Calibration Standard
Last Calibration: 00*1* 12:39 Last Qual Time: **1014 11:41

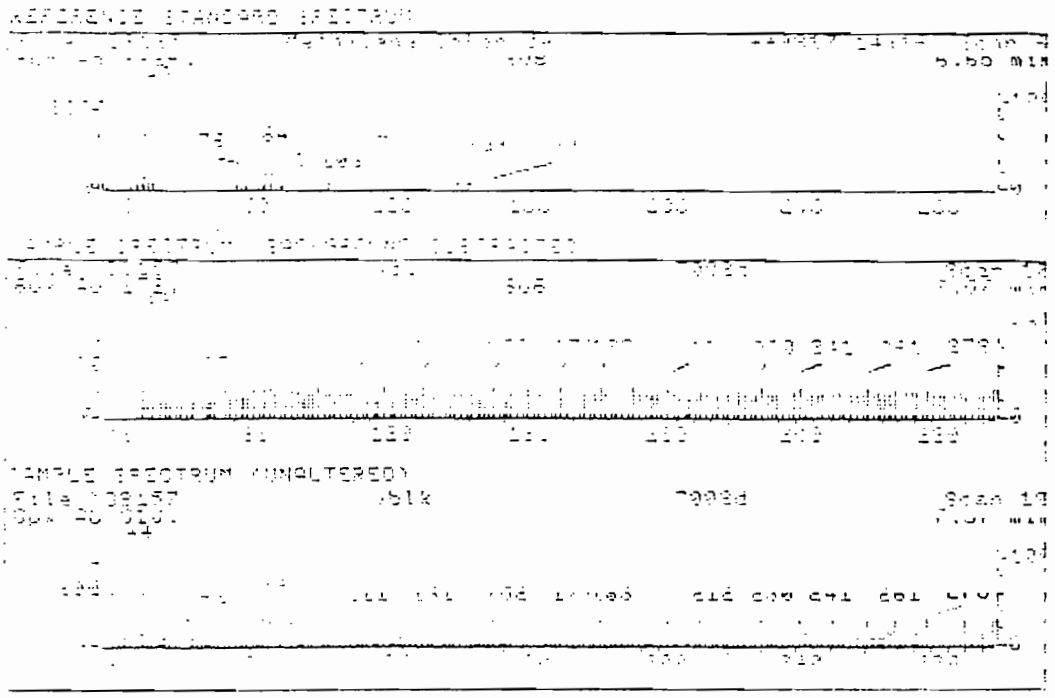
Operator ID: *ARIE
Quant Time : 001014 13:45
Injected at: **1016 12:11

Data File: [illegible] Date Time: 991014 13:45
Sample: [illegible] Collected at: **1014 12:11
Operator: [illegible] Dilution Factor: 1.00000
Misc Info: [illegible] Instrument ID: 7890 D
Method: [illegible]

Purge: [illegible]
Title: 8260 Semivolatiles Calibration Standard
Last Update: [illegible] 10:39 Last Opt Time: **1014 11:41

	Compound	R.T.	Q Ion	Area	Conc	Units	Q
1)	*Bromochloromethane	10.19	128.0	14993	50.00	UG	96
2)	Methylene Chloride	7.67	84.0	7634	5.78	UG	99
[illegible]	1,2-Dichloroethane-d4	11.05	65.0	49345	44.18	UG	100
[illegible]	1,1,2-Trichloroethane	11.44	114.0	99211	50.00	UG	94
7)	*Chlorobenzene-d5	17.30	117.0	74952	50.00	UG	93
[illegible]	Toluene-d8	14.72	98.0	109409	52.34	UG	96
[illegible]	Bromofluorobenzene	19.48	95.0	40971	53.70	UG	53

(#) Compound is ISTD



Data File: 05157::05 Quant Output File: ^DB157::SS
Name: vblk Instrument ID: 7002 D
Misc: 70024
Quant Time: 001016 13:45 Quant ID File: IDS891::MT
Injected at: **1016 12:11 Last Calibration: 000614 12:39
Last Qual Time: **1016 11:41

Compound No : 6
Compound Name : Methylene Chloride
Scan Number : 101
Retention Time: 7.57 min.
Quant Ion : 84.0
Area : 3636
Concentration : 5.78 UG
a-value : 82

1A

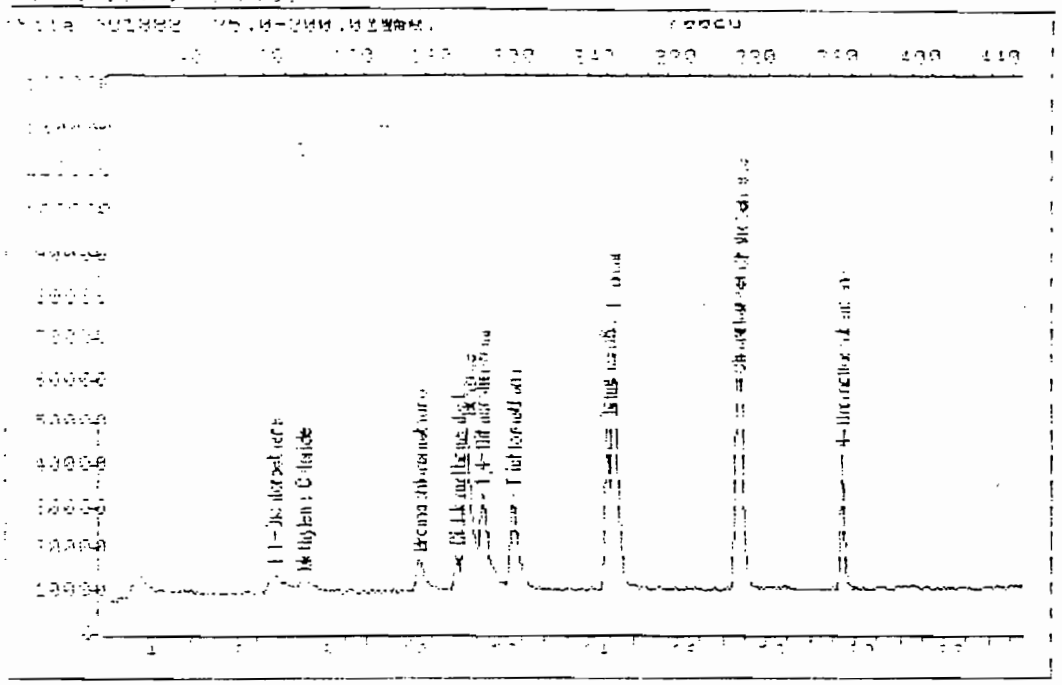
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SMSB

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: SMSB
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1882
Level: (low/med) LOW Date Received: 10/12/00
% Moisture: not dec. 0. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	23.	B
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	52.	
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	1,2-Dichloroethene-trans	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon Tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	60.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	62.	
10061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	62.	
108-90-7	Chlorobenzene	61.	
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
156-59-2	1,2-Dichloroethene-cis	10.	U
106-42-3	m,p-Xylenes	10.	U
95-47-6	o-Xylene	10.	U



Data File: ^01882::06 Quant Output File: ^01882::QT
Name: vmsb Instrument ID: 7002 D
Misc: 70024

Id File: 10S9?1::MT
Title: 40 UGA Continuing Calibration Standard
Last Calibration: 000614 12:39 Last Qcal Time: **1016 11:41

Operator ID: MARIE
Quant Time : 001017 08:42
Injected at: **1016 18:05

QUANT REPORT

Operator ID: MARIE Quant Rev: 7 Quant Time: 001017 08:42
Output File: ^D1882::QT Injected at: **1016 18:05
Data File: >D1882::D6 Dilution Factor: 1.00000
Name: vmsb Instrument ID: 7002 D
Misc: 7002d

ID File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Date: **1016 11:41

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.18	128.0	13148	50.00	UG	8
6)	Methylene Chloride	7.53	84.0	12944	23.45	UG	5
14)	1,1-Dichloroethene	6.84	96.0	19199	51.87	UG	7
19)	1,2-Dichloroethane-d4	11.05	65.0	44988	45.88	UG	10
22)	*1,4-Difluorobenzene	11.60	114.0	76002	50.00	UG	9
29)	Trichloroethane	12.29	130.0	35935	59.61	UG	9
32)	Benzene	11.28	78.0	188435M	61.52	UG	5
36)	*Chlorobenzene-d5	17.32	117.0	70195	50.00	UG	9
41)	Toluene	14.53	91.0	190285	61.90	UG	9
42)	Toluene d-8	14.39	98.0	107210	47.79	UG	9
43)	Chlorobenzene	17.36	112.0	101624	60.97	UG	9
48)	Bromofluorobenzene	19.70	95.0	32947	47.41	UG	4

* Compound is ISTD

1A

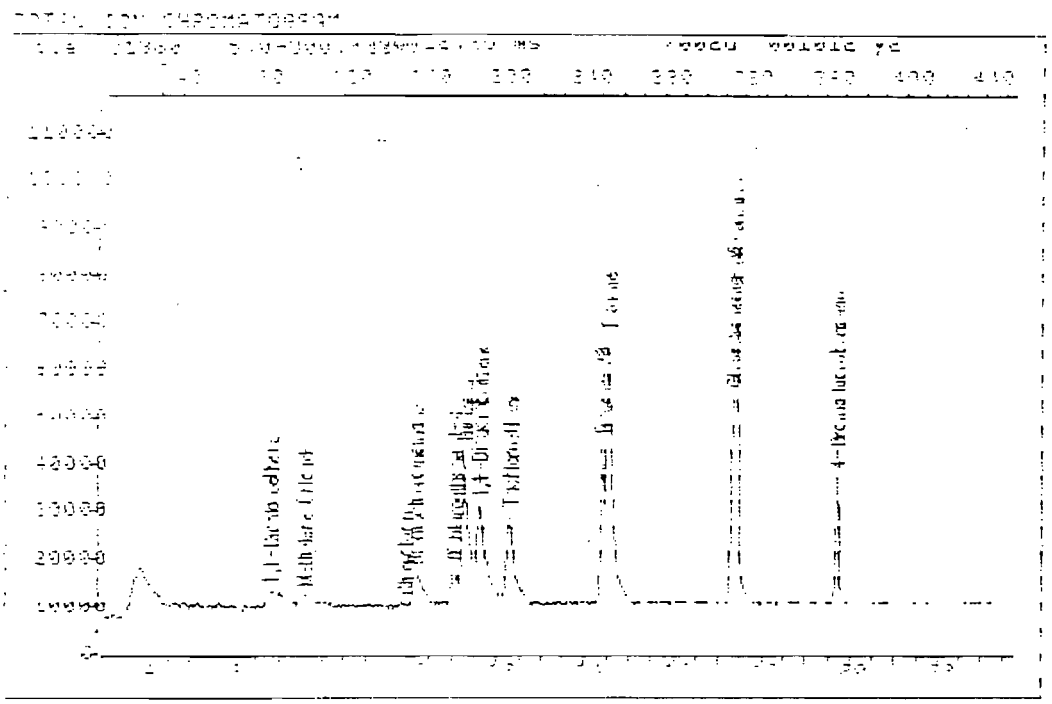
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW0712125 MS

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: MW0712125 MS
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1880
Level: (low/med) LOW Date Received: 10/12/00
% Moisture: not dec. 13. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	26.	B
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	60.	
75-34-3	1,1-Dichloroethane	11.	U
156-60-5	1,2-Dichloroethene-trans	11.	U
67-66-3	Chloroform	4.	J
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	68.	
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	72.	
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	69.	
108-90-7	Chlorobenzene	66.	
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
156-59-2	1,2-Dichloroethene-cis	11.	U
106-42-3	m,p-Xylenes	11.	U
95-47-6	o-Xylene	11.	U



Data File: :D1880::06 Quant Output File: ^D1880::QT
Name: mw0712.25 ms Instrument ID: 7002 D
Misc: 7002d 001010 w2

Id File: ID9891::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000411 10:38 Last Qcal Time: **1014 11:41

Operator ID: MARIE
Quant Time : 001017 08:34
Injected at: **1016 17:06

Operator ID: MAPIE Quant Method: 7 Quant Time: 001017 09:34
Data File: I1000::0T Integrated at: **1014 17:04
Data Path: :*1000::04 Dilution Factor: 1.00000
Name: *TIC 25 ng Instrument ID: 7000 0
Misc: 70000 001000 +0

ID File: I0**1::0T
Title: HP U04 Continuing Calibration Standard
Last Calibration: 000-1* 10:?? Last Qual Time: **1014 11:41

	Compound	R.T	Q Ion	Area	Conc	Units	D
1)	*Bromochloromethane	10.14	128.0	12110	50.00	UG	7
6)	Methylene Chloride	7.57	84.0	11540	22.74	UG	5
14)	1,1-Dichloroethene	6.70	96.0	17804	50.00	UG	7
19)	Chloroform	9.91	83.0	4803	3.02	UG	7
1?	1,2-Dichloropropane-d4	11.05	65.0	30040	45.35	UG	10
22)	1,1,2-Trichloroethane	11.40	114.0	44057	50.00	UG	0
2?	Tetrachloroethene	12.20	130.0	31010	50.30	UG	0
32)	Benzene	11.00	78.0	147041	47.00	UG	5
3?)	*Chlorobenzene-d5	17.30	117.0	42500	50.00	UG	0
41)	Toluene	14.57	91.0	144044	49.03	UG	0
42)	Toluene d-8	14.30	98.0	92441	44.09	UG	0
43)	Chlorobenzene	17.36	112.0	86871	57.95	UG	0
4?)	Bromofluorobenzene	19.??	95.0	29895	44.40	UG	5

* Compound is ISTD

1A

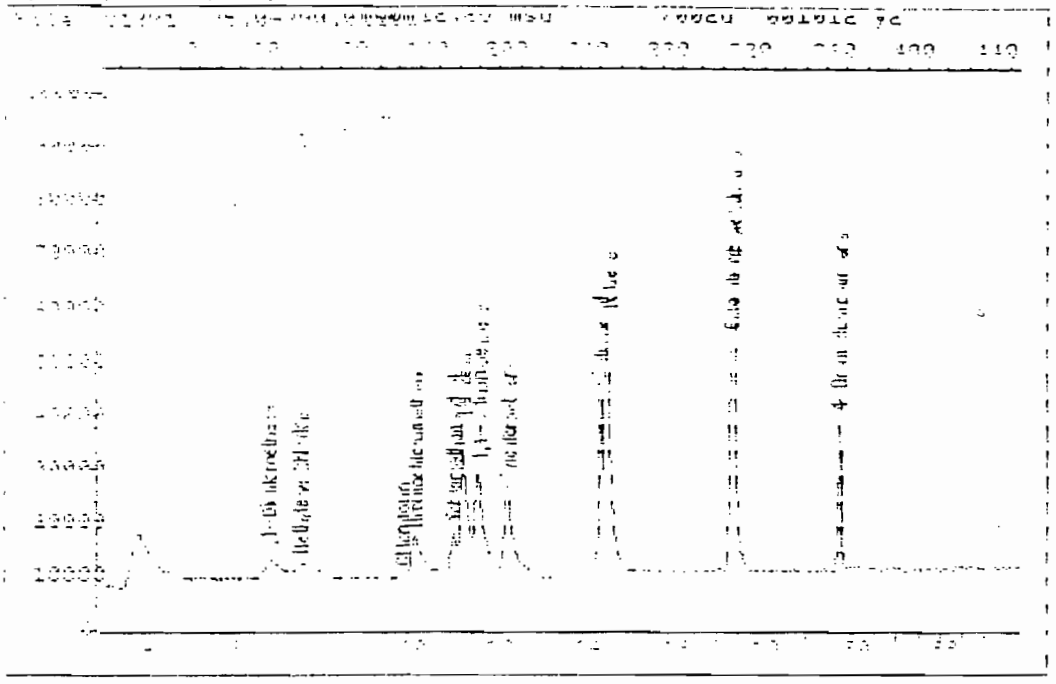
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW0712125 MSD

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0015 SAS No.: SDG No.: MW0712
Matrix: (soil/water) SOIL Lab Sample ID: MW0712125 MSD
Sample wt/vol: 5.000 (g/mL) G Lab File ID: D1881
Level: (low/med) LOW Date Received: 10/12/00
% Moisture: not dec. 13. Date Analyzed: 10/16/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	27.	B
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	52.	
75-34-3	1,1-Dichloroethane	11.	U
156-60-5	1,2-Dichloroethene-trans	11.	U
67-66-3	Chloroform	3.	J
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	50.	
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	59.	
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	56.	
108-90-7	Chlorobenzene	56.	
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
156-59-2	1,2-Dichloroethene-cis	11.	U
106-42-3	m,p-Xylenes	11.	U
95-47-6	o-Xylene	11.	U



Data File: D1881::06 Quant Output File: ^D1881::QT
Name: mw0712.25 msd Instrument ID: 7002 D
Misc: 7002d 001012 v2

Id File: ID5591::MT
Title: 40 VOA Continuing Calibration Standard
Last Calibration: 000614 12:38 Last Qual Time: **1014 11:41

Operator ID: MARIE
Quant Time : 001017 08:41
Injected at: **1016 17:39

Data Path: [illegible]
Data File: [illegible].D
Acq On : [illegible]
Operator: [illegible]
Sample : [illegible]
Misc : [illegible]
ALS Vial: [illegible]

Quan Time: 000317 08:41
Reviewed By: [illegible]
Review Time: **1016 17:35
Dilution Factor: 1.00000
Instrument ID: 7000 D

Method: [illegible].M
Title: 8P UG Continuing Calibration Standard
Last Calibration: 000414 12:39 Last Qcal Time: **1016 11:41

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	*Bromochloromethane	10.19	128.0	11630	50.00	UG	96
6)	Methylene Chloride	7.53	84.0	11631	23.82	UG	54
14)	1,1-Dichloroethene	6.90	96.0	14812	45.24	UG	76
19)	Chloroform	9.86	83.0	3178	2.63	UG	67
18)	1,2-Dichloroethane-d4	11.05	65.0	38693	44.41	UG	100
23)	1,2-Dichloropropane	11.44	114.0	48454	50.00	UG	98
24)	Trichloroethene	12.20	130.0	23595	43.44	UG	96
31)	Benzene	11.38	78.0	140478	50.92	UG	59
34)	*Chlorobenzene-d5	17.30	117.0	63758	50.00	UG	99
41)	Toluene	14.57	91.0	136119	49.75	UG	94
42)	Toluene d-8	14.30	98.0	98784	49.49	UG	94
47)	Chlorobenzene	17.34	112.0	73618	48.54	UG	99
48)	Bromofluorobenzene	19.70	95.0	32672	51.74	UG	49

* Compound is ISTD

CLP

SAMPLE CALCULATIONS FOR VOLATILE ORGANICS:

1) **RRF of Benzene from the VSTD050 analyzed on 10/16/00:**

$$= \frac{\text{area of Benzene in std.}}{\text{area of internal std}} \quad \mathbf{X} \quad \frac{\text{concentration of internal standard.}}{\text{concentration of standard}}$$

$$= \frac{184884}{91759} \times \frac{50}{50} = 2.015$$

2) **Concentration of Benzene in sample MW0712125 MS (AES sample number 001012Y-02 MS):**

$$\text{ug/Kg} = \frac{\text{area of Benzene in sample}}{\text{area of internal standard in sample}} \times \frac{\text{amount of internal std. (ng)}}{\text{(weight g of sample purged)(RRF)(\% solids)}}$$

$$= \frac{167941}{66257} \times \frac{250}{(5.0)(2.015)(0.87)} = 72.3 \text{ ug/Kg}$$

which is reported as 79 ug/Kg on the Form I for Volatile Organics

3) **Calculation of spike recovery for Benzene in MW0712125 Matrix Spike:**

$$\text{Percent spike recovery} = \frac{\text{quantity determined by analysis}}{\text{quantity added to sample}} \times 100$$

$$\text{\% recovery of Benzene} = \frac{(72.3 - 0)}{57.5} \times 100 = 125.7\ \%$$

Adirondack Environmental S[illegible]ces, Inc.
Dry Weight Log

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Review _____ Date 10-18-00

Analyst	Date	Job #	Sample ID	Dish wt.	Wet + Dish	Wet weight	Dry + Dish	Dry Weight	% Moisture	% Solids	Decant
JLK	10-17-00		Tin #6 921 SO6	3.494	10.621	7.127	9.3980	5.904	17	83	
			7 921 807	3.499	14.483	10.984	12.56[illegible]	9.0621	17	83	
			8 927 BH01	3.48	9.72	6.24	8.7629	5.2829	15	85	
			9 927 BH02	3.51	10.62	7.11	8.4262	4.9162	31	69	
			10 927 BH03	3.48	9.80	6.32	9.4592	5.9792	5	95	
JLK	10-19-00		10 07 A01	3.524	19.494	15.97	16.180	12.626	21	79	
			10 07 A02	3.497	11.429	7.932	9.824	6.827	20	80	
			10 07 A03	3.511	15.418	11.907	11.821	8.31	30	70	
			10 10 AQ01	3.488	10.151	6.663	9.779	6.291	6	94	
			10 10 AQ02	3.494	10.822	7.828	10.282	6.788	7	93	
			10 11 B01	3.510	10.881	7.371	10.335	6.825	7	93	
			B02	3.51	15.28	11.77	13.518	10.008	15	85	
			B03	3.539	8.752	5.213	8.216	4.677	10	90	
			B04	3.465	10.118	6.653	9.438	5.973	10	90	
			B05	3.473	10.172	6.699	9.427	5.954	11	89	
			10 12 401	3.505	11.782	8.277	9.429	5.924	28	72	
			402	3.516	11.565	8.049	10.501	6.985	13	87	

Adirondack Environmental S[illegible]ces, Inc.
Dry Weight Log

Page 488

Review _____ Date 10-18-00

Analyst	Date	Job #	Sample ID	Dish wt.	Wet + Dish	Wet weight	Dry + Dish	Dry Weight	% Moisture	% Solids	Decant
SLK	10-19-00		1013 AA01	3.489	10.337	6.858	9.407	5.928	14	86	
			1013 AA02	3.497	12.456	8.959	10.546	7.049	21	79	
			1013 AA03	3.494	12.425	8.931	11.794	8.30	7	93	
			1013 AA05	8.492	12.570	9.078	12.238	8.746	4	96	
	See pg 494		1013 AA06	3.487	10.376	6.889	4.686	1.193	83	17	←
			1013 AA07	3.471	10.749	7.008	10.188	6.717	4	96	
			1013 AA08	3.480	18.831	15.351	17.008	13.528	12	88	
			1013 AA09	3.494	13.38	9.886	10.408	6.914	30	70	
			1013 AA10	3.478	18.82	15.342	17.513	14.035	8	91	
			1013 AA11	3.521	13.26	9.739	12.235	8.714	11	89	
			1013 AA12	3.498	9.454	5.956	8.545	5.047	15	85	
			1013 AA04	3.460	9.514	6.054	8.598	5.138	15	85	
			~~1012 401~~	~~3.542~~	~~10.091~~	~~6.549~~	~~4.141~~	~~7.549~~		115 ~~129~~	?
			1012 402	3.539	11.661	8.122	10.501	6.962	14	86	
			1013 AF01	3.490	11.208	7.718	9.496	6.006	22	78	
			1013 AF02	3.525	9.497	5.972	8.963	5.438	9	91	
			1019 BE01	3.543	18	14.750	15.967	12.424		84%	

APPENDIX G

LABORATORY ANALYTICAL REPORTS & DUSR – NOVEMBER 17, 2000
GROUNDWATER RESULTS

Organic Data Usability Summary Report
Congers/Wilsonart
Adirondack Environmental Services Laboratory
Case: ETH 0020
SDG # MW-1

Analytical results for nine (9) groundwater samples and one (1) field duplicate from the above referenced site were reviewed to evaluate the data quality. Data were assessed in accordance with SW-846 Methods 8260, Rev. 3 (12/96), the United States Environmental Protection Agency (USEPA) document **USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review** (February 1994) and the USEPA Region II document **CLP Organics Data Review and Preliminary Review** (SOP No. HW-6, Revision No. 8, January, 1992), where applicable. This validation pertains to the following samples collected by Earth Tech personnel on November 17, 2000:

MW-1	**MW-2**	**MW-3**
MW-4	**MW-5**	**MW-6**
MW-7	**MW-8**	**MW-9**

Field Duplicate : FD111700

The following items/criteria applicable to the samples listed above were reviewed:

X Deliverable Requirements
X Case Narrative
X Holding Times and Sample Preparation
X GC/MS Instrument Performance Check
X Initial and Continuing Calibration Data
X Method and Field Blank Summary and Data
X Surrogate Recoveries
X Matrix Spike/Matrix Spike Duplicates
X Laboratory Control Sample
X Internal Standard Areas and Retention Times
X Target Compound Identification/Quantitation
X Quantitation Reports and Mass Spectral Data

All the above items were in technical compliance with the SW-846 Methods, laboratory QC criteria and USEPA QA criteria

Method 8260 –Volatile Organic Compounds

Summary

In summary, based on 350 sample data points, none of which were qualified as estimated ("J"), and none qualified as unusable, and since estimated data are fully compliant and usable, the usability of this data package is 100%.

Prepared By
Paul D. Wheeler
Environmental Scientist

12/15/00
Date

Reviewed By
C. Brett Mongillo
Manager Chemistry & Sampling Services

12.15.00
Date

Wilson Arts

SDG# (Case) ETH 0020

EPA 8260 Volatiles

Samples mw-1, mw-2, mw-3, mw-4, mw-5, mw-6, mw-7, mw-8, mw-9, FD111700

Holding times 14 days from Collection

collected 11/17/00

recieved 11/17/00 - within holding time (OK)

extracted —

analyzed 11/20/00, 11/21/00

System monitoring - (ok)

ms/msD ms - (ok)

msD - (ok)

msB - (ok)

Method Blank - VBLK01 - All samples except mw-4

VBLK02 - mw-4

Instrument Performance check (ok)

Internal std (ok)

FDC's (ok)

Adirondack Environmental Services, Inc.
Experience is the solution
314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

Earth Tech, Inc.
12 Metro Park Road
Albany, New York 12205

Attention: Mark Williams

Adirondack Environmental Services, Inc.
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TITLE PAGE

On November 17, 2000 eleven water samples were received by Adirondack Environmental Services, Inc. from Earth Tech at the Wilsonart site. These samples were analyzed for Volatile Organics in accordance with methodology as detailed by the contract. The project was completed on December 6, 2000.

Laboratory Manager

Date: 12/6/00

Adirondack Environmental Services, Inc.
Experience is the solution
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SAMPLE DATA

SUMMARY PACKAGE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND
ANALYTICAL REQUIREMENT SUMMARY

Customer Sample Code	Laboratory Sample Code	*VOA GC/MS Method	*BNA GC/MS Method	*PCB GC Method	*Pest GC Method	*Herb GC Method	*Metals	*Other CN
MW-1	001117AT-01	X						
MW-2	001117AT-02	X						
MW-3	001117AT-03	X						
MW-4	001117AT-04	X						
MW-5	001117AT-05	X						
MW-6	001117AT-06	X						
MW-7	001117AT-07	X						
MW-8	001117AT-08	X						
MW-9	001117AT-09	X						
FD 111700	001117AT-10	X						
Trip Blank	001117AT-11	X						

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOLATILE (VOA)
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
001117AT-01	WATER	11/17/00	11/17/00	N/A	11/20/00
001117AT-02	WATER	11/17/00	11/17/00	N/A	11/20/00
001117AT-03	WATER	11/17/00	11/17/00	N/A	11/20/00
001117AT-04	WATER	11/17/00	11/17/00	N/A	11/21/00
001117AT-05	WATER	11/17/00	11/17/00	N/A	11/20/00
001117AT-06	WATER	11/17/00	11/17/00	N/A	11/20/00
001117AT-07	WATER	11/17/00	11/17/00	N/A	11/20/00
001117AT-08	WATER	11/17/00	11/17/00	N/A	11/20/00
001117AT-09	WATER	11/17/00	11/17/00	N/A	11/20/00
001117AT-10	WATER	11/17/00	11/17/00	N/A	11/20/00
001117AT-11	WATER	11/17/00	11/17/00	N/A	11/20/00

Adirondack Environmental Services, Inc.
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Case Narrative

Client: Earth Tech – Wilsonart

Case: ETH 0020

SDG: MW-1

Sample ID	Laboratory Sample ID	Date Received	VTSR	Matrix
MW-1	001117AT-01	11/17/00	19:00	Water
MW-2	001117AT-02	11/17/00	19:00	Water
MW-3	001117AT-03	11/17/00	19:00	Water
MW-4	001117AT-04	11/17/00	19:00	Water
MW-5	001117AT-05	11/17/00	19:00	Water
MW-6	001117AT-06	11/17/00	19:00	Water
MW-7	001117AT-07	11/17/00	19:00	Water
MW-8	001117AT-08	11/17/00	19:00	Water
MW-9	001117AT-09	11/17/00	19:00	Water
FD 111700	001117AT-10	11/17/00	19:00	Water
Trip Blank	001117AT-11	11/17/00	19:00	Water

Volatile Organics

1) The RRF for the compound 1,1,2,2-Tetrachloroethane was outside the required limits in the initial calibration analyzed on 11/14/00. The RRF for this compound was 0.468. According to the protocol, two volatile organic compounds may exceed the %RSD limit of 20.5 % or the specified RRF as long as the %RSD is less than 40 % and the RRF is above 0.010. The %RSD was below 40 % and the RRF was greater than 0.010 for this compound.

2) The RRF for the compound 1,1,2,2-Tetrachloroethane was outside the required limits in the continuing calibration analyzed on 11/20/00. The RRF for this compound was 0.392. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % or the specified RRF as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

3) The RRF's for the compounds Trichloroethene and 1,1,2,2-Tetrachloroethane were outside the required limits in the continuing calibration analyzed on 11/21/00. The RRF's for these compounds were 0.297 and 0.368. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % or the specified RRF as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for these compounds.

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4) Sample MW-4 (AES sample number 001117AT-04) was used for the matrix spike and the matrix spike duplicate. All recoveries were within required limits.

5) The column used in Instrument D for analysis was an RTX-502.2, 60 meters long with an internal diameter of 0.32 mm.

"I certify that this data package is in compliance with the terms and conditions of the protocol, both technically and for completeness, to the best of my knowledge, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Laboratory Manager

Date: 12/6/00

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-1

) Name: AES, Inc. Contract:
) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
:rix: (soil/water) WATER Lab Sample ID: MW-1
ıple wt/vol: 5.000 (g/mL) ML Lab File ID: D2078
'el: (low/med) LOW Date Received: 11/17/00
loisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
.l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	7.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-1

) Name: AES, Inc. Contract:
) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
trix: (soil/water) WATER Lab Sample ID: MW-1
mple wt/vol: 5.000 (g/mL) ML Lab File ID: D2078
vel: (low/med) LOW Date Received: 11/17/00
Moisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

umber TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-2

Name: AES, Inc. Contract:
Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
rix: (soil/water) WATER Lab Sample ID: MW-2
ple wt/vol: 5.000 (g/mL) ML Lab File ID: D2065
el: (low/med) LOW Date Received: 11/17/00
oisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	4.	J
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	42.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-2

) Name: AES, Inc. Contract:
) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
rix: (soil/water) WATER Lab Sample ID: MW-2
ple wt/vol: 5.000 (g/mL) ML Lab File ID: D2065
el: (low/med) LOW Date Received: 11/17/00
oisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

mber TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	76-13-1	Ethane,1,1,2-Trichloro,1,2,2	6.65	220	JN
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3

Name: AES, Inc. Contract:
Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
rix: (soil/water) WATER Lab Sample ID: MW-3
ple wt/vol: 5.000 (g/mL) ML Lab File ID: D2066
el: (low/med) LOW Date Received: 11/17/00
oisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	3.	J
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	16.	
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	170.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-3

) Name: AES, Inc. Contract:
) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
:rix: (soil/water) WATER Lab Sample ID: MW-3
ıple wt/vol: 5.000 (g/mL) ML Lab File ID: D2066
/el: (low/med) LOW Date Received: 11/17/00
foisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
.l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

umber TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	76-13-1	Ethane,1,1,2-Trichloro,1,2,2	6.65	600	JN
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-4

Name: AES, Inc. Contract:
Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
rix: (soil/water) WATER Lab Sample ID: MW-4
ple wt/vol: 5.000 (g/mL) ML Lab File ID: D2086
el: (low/med) LOW Date Received: 11/17/00
oisture: not dec._____ Date Analyzed: 11/21/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-4

) Name: AES, Inc. Contract:
) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
.rix: (soil/water) WATER Lab Sample ID: MW-4
ıple wt/vol: 5.000 (g/mL) ML Lab File ID: D2086
'el: (low/med) LOW Date Received: 11/17/00
loisture: not dec._____ Date Analyzed: 11/21/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
.l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

umber TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
.0.					
.1.					
.2.					
.3.					
.4.					
.5.					
.6.					
.7.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5

Name: AES, Inc. Contract:

Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1

rix: (soil/water) WATER Lab Sample ID: MW-5

ple wt/vol: 5.000 (g/mL) ML Lab File ID: D2068

el: (low/med) LOW Date Received: 11/17/00

oisture: not dec._____ Date Analyzed: 11/20/00

Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	2.	J
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	29.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-5

Name: AES, Inc. Contract:
Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
rix: (soil/water) WATER Lab Sample ID: MW-5
ple wt/vol: 5.000 (g/mL) ML Lab File ID: D2068
el: (low/med) LOW Date Received: 11/17/00
oisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

mber TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	76-13-1	Ethane,1,1,2-Trichloro,1,2,2	6.61	120	JN
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-6

) Name: AES, Inc. Contract:
) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
:rix: (soil/water) WATER Lab Sample ID: MW-6
ıple wt/vol: 5.000 (g/mL) ML Lab File ID: D2069
/el: (low/med) LOW Date Received: 11/17/00
loisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
.l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	3.	J
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	7.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-6

Name: AES, Inc. Contract:
Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
rix: (soil/water) WATER Lab Sample ID: MW-6
ple wt/vol: 5.000 (g/mL) ML Lab File ID: D2069
el: (low/med) LOW Date Received: 11/17/00
oisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

mber TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	76-13-1	Ethane,1,1,2-Trichloro,1,2,2	6.62	19	JN
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-7

) Name: AES, Inc. Contract:
) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
:rix: (soil/water) WATER Lab Sample ID: MW-7
ıple wt/vol: 5.000 (g/mL) ML Lab File ID: D2070
'el: (low/med) LOW Date Received: 11/17/00
loisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
.l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	4.	J
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	22.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-7

) Name: AES, Inc. Contract:
) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
:rix: (soil/water) WATER Lab Sample ID: MW-7
ıple wt/vol: 5.000 (g/mL) ML Lab File ID: D2070
/el: (low/med) LOW Date Received: 11/17/00
foisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
.l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

umber TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	76-13-1	Ethane,1,1,2-Trichloro,1,2,2	6.61	120	JN
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8

Name: AES, Inc. Contract:
Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
rix: (soil/water) WATER Lab Sample ID: MW-8
ple wt/vol: 5.000 (g/mL) ML Lab File ID: D2071
el: (low/med) LOW Date Received: 11/17/00
oisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	2.	J
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	7.	
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	91.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-8

) Name: AES, Inc. Contract:
) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
:rix: (soil/water) WATER Lab Sample ID: MW-8
mple wt/vol: 5.000 (g/mL) ML Lab File ID: D2071
/el: (low/med) LOW Date Received: 11/17/00
Moisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

umber TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	76-13-1	Ethane,1,1,2-Trichloro,1,2,2	6.66	530	JN
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-9

Name: AES, Inc. Contract:
Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
rix: (soil/water) WATER Lab Sample ID: MW-9
ple wt/vol: 5.000 (g/mL) ML Lab File ID: D2072
el: (low/med) LOW Date Received: 11/17/00
oisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	4.	J
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	J
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	9.	
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-9

) Name: AES, Inc. Contract:
) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
:rix: (soil/water) WATER Lab Sample ID: MW-9
ıple wt/vol: 5.000 (g/mL) ML Lab File ID: D2072
'el: (low/med) LOW Date Received: 11/17/00
Ioisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
.l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

.mber TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FD111700

Name: AES, Inc. Contract:

Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1

rix: (soil/water) WATER Lab Sample ID: FD111700

ple wt/vol: 5.000 (g/mL) ML Lab File ID: D2073

el: (low/med) LOW Date Received: 11/17/00

oisture: not dec._____ Date Analyzed: 11/20/00

Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	3.	J
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	16.	
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	180.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FD111700

Name: AES, Inc. Contract:
Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
rix: (soil/water) WATER Lab Sample ID: FD111700
ple wt/vol: 5.000 (g/mL) ML Lab File ID: D2073
el: (low/med) LOW Date Received: 11/17/00
oisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

mber TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 76-13-1	Ethane,1,1,2-Trichloro,1,2,2	6.67	710	JN
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
0.				
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
0.				
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
0.				

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB

Name: AES, Inc. Contract:

Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1

rix: (soil/water) WATER Lab Sample ID: TB

ple wt/vol: 5.000 (g/mL) ML Lab File ID: D2074

el: (low/med) LOW Date Received: 11/17/00

oisture: not dec._____ Date Analyzed: 11/20/00

Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	3.	J
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

TB

) Name: AES, Inc. Contract:
) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
:rix: (soil/water) WATER Lab Sample ID: TB
ıple wt/vol: 5.000 (g/mL) ML Lab File ID: D2074
'el: (low/med) LOW Date Received: 11/17/00
loisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
.l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

umber TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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5.					
6.					
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9.					
.0.					
.1.					
.2.					
.3.					
.4.					
.5.					
16.					
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30.					

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Name: AES, Inc. Contract:

Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
1	VBLK01	99	101	93		0
2	MW-2	100	104	98		0
3	MW-3	104	108	103		0
4	MW-5	100	103	98		0
5	MW-6	103	105	94		0
6	MW-7	102	109	99		0
7	MW-8	102	107	105		0
8	MW-9	107	101	94		0
9	FD111700	102	102	107		0
10	TB	101	103	98		0
11	MW-4 MS	103	108	108		0
12	MW-4 MSD	101	101	102		0
13	VMSB	105	108	104		0
14	MW-1	101	105	97		0
15	VBLK02	99	100	96		0
16	MW-4	102	101	99		0
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

	QC LIMITS
SMC1 (TOL) = Toluene d-8	(88-110)
SMC2 (BFB) = Bromofluorobenzene	(86-115)
SMC3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

) Name: AES, Inc. Contract:

) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1

:rix Spike - EPA Sample No.: MW-4

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	MS CONCENTRATION (UG/L)	MS % REC #	QC LIMITS REC.
.,1-Dichloroethene	50.	0.	43.	86	61-145
'richloroethene	50.	0.	55.	110	71-120
)enzene	50.	0.	57.	114	76-127
'oluene	50.	0.	59.	118	76-125
:hlorobenzene	50.	0.	60.	120	75-130

COMPOUND	SPIKE ADDED (UG/L)	MSD CONCENTRATION (UG/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
.,1-Dichloroethene	50.	40.	80	7	14	61-145
'richloroethene	50.	54.	108	2	14	71-120
)enzene	50.	57.	114	0	11	76-127
'oluene	50.	59.	118	0	13	76-125
:hlorobenzene	50.	59.	118	2	13	75-130

:olumn to be used to flag recovery and RPD values with an asterisk

/alues outside of QC limits

): 0 out of 5 outside limits
ike Recovery: 0 out of 10 outside limits

MMENTS:

3C

WATER VOLATILE MATRIX SPIKE BLANK RECOVERY

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1

Matrix Spike - EPA Sample No.: Blank Level:(Low/Med) Low

COMPOUND	SPIKE ADDED ug/l	SAMPLE CONC. ug/l	MS CONC. ug/l	MS % REC. #	QC LIMITS REC.
1,1-Dichloroethene	50	0	44	87	61-145
Trichloroethene	50	0	55	111	71-120
Benzene	50	0	57	114	76-127
Toluene	50	0	61	122	76-125
Chlorobenzene	50	0	62	124	75-130

Column used to flag recovery values

* Values outside of required QC limits

Spike Recovery 0 out of 5 outside limits

Comments: _____

_____

_____

FORM III VOA-1

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK01

) Name: AES, Inc. Contract:

) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1

) File ID: DB176 Lab Sample ID: VBLK

:e Analyzed: 11/20/00 Time Analyzed: 12:51

Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

;trument ID: H5970 D

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	MW-2	MW-2	D2065	14:49
2	MW-3	MW-3	D2066	15:18
3	MW-5	MW-5	D2068	16:17
4	MW-6	MW-6	D2069	16:46
5	MW-7	MW-7	D2070	17:16
6	MW-8	MW-8	D2071	17:45
7	MW-9	MW-9	D2072	18:14
8	FD111700	FD111700	D2073	18:44
9	TB	TB	D2074	19:13
10	MW-4 MS	MW-4 MS	D2075	19:42
11	MW-4 MSD	MW-4 MSD	D2076	20:11
12	VMSB	VMSB	D2077	20:41
13	MW-1	MW-1	D2078	21:10
14				
15				
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MMENTS:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

) Name: AES, Inc. Contract:
) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
:rix: (soil/water) WATER Lab Sample ID: VBLK
ıple wt/vol: 5.000 (g/mL) ML Lab File ID: DB176
/el: (low/med) LOW Date Received:
foisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
.l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLK01

) Name: AES, Inc. Contract:
) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
:rix: (soil/water) WATER Lab Sample ID: VBLK01
ıple wt/vol: 5.000 (g/mL) ML Lab File ID: DB176
/el: (low/med) LOW Date Received:
loisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
.l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

ımber TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
.0.					
.1.					
.2.					
.3.					
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.7.					
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.9.					
:0.					
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:7.					
:8.					
:9.					
30.					

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK02

) Name: AES, Inc. Contract:

) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1

) File ID: DB177 Lab Sample ID: VBLK

.e Analyzed: 11/21/00 Time Analyzed: 12:17

Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

trument ID: H5970 D

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	MW-4	MW-4	D2086	16:12
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
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24				
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27				
28				
29				
30				

MENTS:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02

) Name: AES, Inc. Contract:
) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
:rix: (soil/water) WATER Lab Sample ID: VBLK
mple wt/vol: 5.000 (g/mL) ML Lab File ID: DB177
vel: (low/med) LOW Date Received:
Moisture: not dec._____ Date Analyzed: 11/21/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLK02

› Name: AES, Inc. Contract:
› Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
.rix: (soil/water) WATER Lab Sample ID: VBLK02
ıple wt/vol: 5.000 (g/mL) ML Lab File ID: DB177
'el: (low/med) LOW Date Received:
loisture: not dec._____ Date Analyzed: 11/21/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
.l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

mber TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					
1.					
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8.					
9.					
0.					
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5.					
6.					
7.					
8.					
9.					
0.					

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

) Name: AES, Inc. Contract:
) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
) File ID (Standard): DS176 Date Analyzed: 11/20/00
)trument ID: H5970 D Time Analyzed: 12:22
Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

	IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
12 HOUR STD	11337.	10.26	73240.	11.72	65967.	17.40
UPPER LIMIT	22674.	10.76	146480.	12.22	131934.	17.90
LOWER LIMIT	5669.	9.76	36620.	11.22	32984.	16.90
EPA SAMPLE NO.						
VBLK01	11354.	10.26	71848.	11.73	67121.	17.36
MW-2	10511.	10.27	66366.	11.73	63511.	17.41
MW-3	9555.	10.22	65138.	11.74	58280.	17.42
MW-5	9980.	10.27	61007.	11.69	58417.	17.38
MW-6	10346.	10.24	61340.	11.71	56479.	17.39
MW-7	9201.	10.24	57573.	11.70	53726.	17.39
MW-8	9535.	10.23	62069.	11.70	58906.	17.38
MW-9	10523.	10.27	63259.	11.69	58533.	17.37
FD111700	8931.	10.24	61662.	11.71	58401.	17.39
TB	9729.	10.28	61488.	11.70	58098.	17.38
MW-4 MS	9049.	10.27	62758.	11.74	58647.	17.42
MW-4 MSD	9552.	10.27	64294.	11.74	59696.	17.42
VMSB	9128.	10.26	62871.	11.73	56459.	17.41
MW-1	10358.	10.26	63109.	11.73	60001.	17.41

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

) Name: AES, Inc. Contract:
) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
) File ID (Standard): DS177 Date Analyzed: 11/21/00
;trument ID: H5970 D Time Analyzed: 11:47
Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

	IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
12 HOUR STD	12396.	10.26	80860.	11.72	73848.	17.40
UPPER LIMIT	24792.	10.76	161720.	12.22	147696.	17.90
LOWER LIMIT	6198.	9.76	40430.	11.22	36924.	16.90
EPA SAMPLE NO.						
VBLK02	11969.	10.26	78681.	11.72	74088.	17.40
MW-4	10991.	10.25	71687.	11.71	66160.	17.38

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

SAMPLE DATA

PACKAGE

Adirondack Environmental Services, Inc.
Experience is the solution
314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

Case Narrative

Client: Earth Tech – Wilsonart

Case: ETH 0020

SDG: MW-1

Sample ID	Laboratory Sample ID	Date Received	VTSR	Matrix
MW-1	001117AT-01	11/17/00	19:00	Water
MW-2	001117AT-02	11/17/00	19:00	Water
MW-3	001117AT-03	11/17/00	19:00	Water
MW-4	001117AT-04	11/17/00	19:00	Water
MW-5	001117AT-05	11/17/00	19:00	Water
MW-6	001117AT-06	11/17/00	19:00	Water
MW-7	001117AT-07	11/17/00	19:00	Water
MW-8	001117AT-08	11/17/00	19:00	Water
MW-9	001117AT-09	11/17/00	19:00	Water
FD 111700	001117AT-10	11/17/00	19:00	Water
Trip Blank	001117AT-11	11/17/00	19:00	Water

Volatile Organics

1) The RRF for the compound 1,1,2,2-Tetrachloroethane was outside the required limits in the initial calibration analyzed on 11/14/00. The RRF for this compound was 0.468. According to the protocol, two volatile organic compounds may exceed the %RSD limit of 20.5 % or the specified RRF as long as the %RSD is less than 40 % and the RRF is above 0.010. The %RSD was below 40 % and the RRF was greater than 0.010 for this compound.

2) The RRF for the compound 1,1,2,2-Tetrachloroethane was outside the required limits in the continuing calibration analyzed on 11/20/00. The RRF for this compound was 0.392. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % or the specified RRF as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

3) The RRF's for the compounds Trichloroethene and 1,1,2,2-Tetrachloroethane were outside the required limits in the continuing calibration analyzed on 11/21/00. The RRF's for these compounds were 0.297 and 0.368. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % or the specified RRF as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for these compounds.

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4) Sample MW-4 (AES sample number 001117AT-04) was used for the matrix spike and the matrix spike duplicate. All recoveries were within required limits.

5) The column used in Instrument D for analysis was an RTX-502.2, 60 meters long with an internal diameter of 0.32 mm.

"I certify that this data package is in compliance with the terms and conditions of the protocol, both technically and for completeness, to the best of my knowledge, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Laboratory Manager

Date: 12/6/00

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, New York 12207
518-434-4546/434-0891 FAX

CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:	Address:
EARTH TECH	12 METRO PARK Rd. ALBANY, NY
Send Report To:	**Project Name (Location)**
MARK Williams	Wilsonart
Client Phone No: 458-1313	**PO Number:**
Client Fax No:	

Samplers: (Names) MINDA KIRK

Samplers: (Signature) Minda Kirk

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
001117 AT01	MW-1	11/17/00	A/P	GW		X	2	EPA - Method
AT02	MW-2		A/P					8260
AT03	MW-3		A/P					VOA
AT04	MW-4		A/P					CAT. B
	MW-4 MS/MSD		A/P					Deliverables
AT05	MW-5		A/P					
AT06	MW-6		A/P					
AT07	MW-7		A/P					
AT08	MW-8		A/P					
AT09	MW-9		A/P					
AT10	FD 111700		A/P					
AT11	TRIP BLANK		A/P	NA		X	1	
			A/P					
			A/P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

Special Instructions/Remarks: CAT. B Deliverables

CC Report To:

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Minda Kirk		
Relinquished by: (Signature)	**Received at Laboratory by:** KB Fuller	**Date/Time** 11/17/00 19:00

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

Adirondack Environmental Services
Internal Chain of Custody
AES Project # 001117AT

mple # 001117AT01 Client Sample ID MW-1 # Bottles: 2

ttle	Out Relinquished	Received	Date/Time	Back Relinquished	Received	Date/Time	Analysis
1	M.L	[illegible]	11/18 8:00				VOA
2	↓	↓	↓				↓

mple # 001117AT02 Client Sample ID MW-2 # Bottles: 2

ttle	Out Relinquished	Received	Date/Time	Back Relinquished	Received	Date/Time	Analysis
1	M.L	[illegible]	11/18 8:00				VOA
2	↓	↓	↓				↓

mple # 001117AT03 Client Sample ID MW-3 # Bottles: 2

ttle	Out Relinquished	Received	Date/Time	Back Relinquished	Received	Date/Time	Analysis
1	M.L	[illegible]	11/18 8:00				VOA
2	↓	↓	↓				↓

mple # 001117AT04 Client Sample ID MW-4 # Bottles: 4

ttle	Out Relinquished	Received	Date/Time	Back Relinquished	Received	Date/Time	Analysis
1	M.L	[illegible]	11/18 8:00				VOA
2	↓	↓	↓				↓
3	↓	↓	↓				↓
4	↓	↓	↓				↓

mple # 001117AT05 Client Sample ID MW-5 # Bottles: 2

ttle	Out Relinquished	Received	Date/Time	Back Relinquished	Received	Date/Time	Analysis
1	M.L	[illegible]	11/18 8:00				VOA
2	↓	↓	↓				↓

Adirondack Environmental Services
Internal Chain of Custody
AES Project # 001117AT

mple # 001117AT06 Client Sample ID MW-6 # Bottles: 2

tle	Out Relinquished	Received	Date/Time	Back Relinquished	Received	Date/Time	Analysis
l	M.L		11/18 8:00				VOA
2	↓	↓	↓				↓

mple # 001117AT07 Client Sample ID MW-7 # Bottles: 2

tle	Out Relinquished	Received	Date/Time	Back Relinquished	Received	Date/Time	Analysis
l	M.L		11/18 8:00				VOA
2	↓	↓	↓				↓

mple # 001117AT08 Client Sample ID MW-8 # Bottles: 2

tle	Out Relinquished	Received	Date/Time	Back Relinquished	Received	Date/Time	Analysis
l	M.L		11/18 8:00				VOA
2	↓	↓	↓				↓

mple # 001117AT09 Client Sample ID MW-9 # Bottles: 2

tle	Out Relinquished	Received	Date/Time	Back Relinquished	Received	Date/Time	Analysis
l	M.L		11/18 8:00				VOA
2	↓	↓	↓				↓

mple # 001117AT10 Client Sample ID FD 111700 # Bottles: 2

tle	Out Relinquished	Received	Date/Time	Back Relinquished	Received	Date/Time	Analysis
1	M.L		11/18 8:00				VOA
2	↓	↓	↓				↓

mple # 001117AT11 Client Sample ID Trip Blank # Bottles: 1

tle	Out Relinquished	Received	Date/Time	Back Relinquished	Received	Date/Time	Analysis
l	M.L		11/18 8:00				

VOLATILE ORGANICS

ANALYSIS

QC

SUMMARY

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Name: AES, Inc. Contract:

Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
1	VBLK01	99	101	93		0
2	MW-2	100	104	98		0
3	MW-3	104	108	103		0
4	MW-5	100	103	98		0
5	MW-6	103	105	94		0
6	MW-7	102	109	99		0
7	MW-8	102	107	105		0
8	MW-9	107	101	94		0
9	FD111700	102	102	107		0
10	TB	101	103	98		0
11	MW-4 MS	103	108	108		0
12	MW-4 MSD	101	101	102		0
13	VMSB	105	108	104		0
14	MW-1	101	105	97		0
15	VBLK02	99	100	96		0
16	MW-4	102	101	99		0
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

	QC LIMITS
SMC1 (TOL) = Toluene d-8	(88-110)
SMC2 (BFB) = Bromofluorobenzene	(86-115)
SMC3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

o Name: AES, Inc. Contract:

b Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1

trix Spike - EPA Sample No.: MW-4

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	MS CONCENTRATION (UG/L)	MS % REC #	QC LIMITS REC.
l,1-Dichloroethene	50.	0.	43.	86	61-145
Trichloroethene	50.	0.	55.	110	71-120
Benzene	50.	0.	57.	114	76-127
Toluene	50.	0.	59.	118	76-125
Chlorobenzene	50.	0.	60.	120	75-130

COMPOUND	SPIKE ADDED (UG/L)	MSD CONCENTRATION (UG/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
l,1-Dichloroethene	50.	40.	80	7	14	61-145
Trichloroethene	50.	54.	108	2	14	71-120
Benzene	50.	57.	114	0	11	76-127
Toluene	50.	59.	118	0	13	76-125
Chlorobenzene	50.	59.	118	2	13	75-130

Column to be used to flag recovery and RPD values with an asterisk

Values outside of QC limits

D: 0 out of 5 outside limits
ike Recovery: 0 out of 10 outside limits

MMENTS:

3C

WATER VOLATILE MATRIX SPIKE BLANK RECOVERY

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1

Matrix Spike - EPA Sample No.: Blank Level:(Low/Med) Low

COMPOUND	SPIKE ADDED ug/l	SAMPLE CONC. ug/l	MS CONC. ug/l	MS % REC. #	QC LIMITS REC.
1,1-Dichloroethene	50	0	44	87	61-145
Trichloroethene	50	0	55	111	71-120
Benzene	50	0	57	114	76-127
Toluene	50	0	61	122	76-125
Chlorobenzene	50	0	62	124	75-130

Column used to flag recovery values

* Values outside of required QC limits

Spike Recovery 0 out of 5 outside limits

Comments: _____

_____

_____

FORM III VOA-1

4A

VOLATILE METHD BLANK SUMMARY

EPA SAMPLE NO.

VBLK01

) Name: AES, Inc. Contract:

) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1

) File ID: DB176 Lab Sample ID: VBLK

.e Analyzed: 11/20/00 Time Analyzed: 12:51

Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

trument ID: H5970 D

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	MW-2	MW-2	D2065	14:49
2	MW-3	MW-3	D2066	15:18
3	MW-5	MW-5	D2068	16:17
4	MW-6	MW-6	D2069	16:46
5	MW-7	MW-7	D2070	17:16
6	MW-8	MW-8	D2071	17:45
7	MW-9	MW-9	D2072	18:14
8	FD111700	FD111700	D2073	18:44
9	TB	TB	D2074	19:13
10	MW-4 MS	MW-4 MS	D2075	19:42
11	MW-4 MSD	MW-4 MSD	D2076	20:11
12	VMSB	VMSB	D2077	20:41
13	MW-1	MW-1	D2078	21:10
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
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26				
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29				
30				

MENTS:

e 1 of 1

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK02

Name: AES, Inc. Contract:

Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1

File ID: DB177 Lab Sample ID: VBLK

e Analyzed: 11/21/00 Time Analyzed: 12:17

Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

trument ID: H5970 D

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	MW-4	MW-4	D2086	16:12
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
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29				
30				

MENTS:

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

) Name: AES, Inc. Contract:

) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1

) File ID: DT168 BFB Injection Date: 11/14/00

trument ID.: H5970 D BFB Injection Time: 11:08

Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	33.2
75	30.0 - 60.0% of mass 95	57.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.4
173	Less than 2.0% of mass 174	.0 (.0)1
174	50.0 - 120.0% of mass 95	55.4
175	5.0 - 9.0 % of mass 174	4.2 (7.6)1
176	95.0 - 101.0% of mass 174	54.6 (98.6)1
177	5.0 - 9.0% of mass 176	3.9 (7.1)2

1-Value is % mass 174 2-Value is % mass 176

S CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD010	VSTD010	DS168	11/14/00	11:32
2	VSTD020	VSTD020	DS169	11/14/00	12:02
3	VSTD050	VSTD050	DS170	11/14/00	12:31
4	VSTD100	VSTD100	DS171	11/14/00	13:01
5	VSTD200	VSTD200	DS172	11/14/00	13:30
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Name: AES, Inc. Contract:

Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1

File ID: DT176 BFB Injection Date: 11/20/00

trument ID.: H5970 D BFB Injection Time: 11:51

Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	34.9
75	30.0 - 60.0% of mass 95	55.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.4
73	Less than 2.0% of mass 174	.0 (.0)1
74	50.0 - 120.0% of mass 95	56.9
75	5.0 - 9.0 % of mass 174	4.4 (7.7)1
76	95.0 - 101.0% of mass 174	54.5 (95.8)1
77	5.0 - 9.0% of mass 176	4.1 (7.5)2

1-Value is % mass 174 2-Value is % mass 176

S CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD050	VSTD050	DS176	11/20/00	12:22
2	VBLK01	VBLK	DB176	11/20/00	12:51
3	MW-2	MW-2	D2065	11/20/00	14:49
4	MW-3	MW-3	D2066	11/20/00	15:18
5	MW-5	MW-5	D2068	11/20/00	16:17
6	MW-6	MW-6	D2069	11/20/00	16:46
7	MW-7	MW-7	D2070	11/20/00	17:16
8	MW-8	MW-8	D2071	11/20/00	17:45
9	MW-9	MW-9	D2072	11/20/00	18:14
10	FD111700	FD111700	D2073	11/20/00	18:44
11	TB	TB	D2074	11/20/00	19:13
12	MW-4 MS	MW-4 MS	D2075	11/20/00	19:42
13	MW-4 MSD	MW-4 MSD	D2076	11/20/00	20:11
14	VMSB	VMSB	D2077	11/20/00	20:41
15	MW-1	MW-1	D2078	11/20/00	21:10
16					
17					
18					
19					
20					
21					
22					

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

) Name: AES, Inc. Contract:

) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1

) File ID: DT177 BFB Injection Date: 11/21/00

:trument ID.: H5970 D BFB Injection Time: 11:23

Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

ı/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	39.3
75	30.0 - 60.0% of mass 95	52.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
.73	Less than 2.0% of mass 174	.0 (.0)1
.74	50.0 - 120.0% of mass 95	52.1
.75	5.0 - 9.0 % of mass 174	4.5 (8.6)1
.76	95.0 - 101.0% of mass 174	49.7 (95.4)1
77	5.0 - 9.0% of mass 176	3.7 (7.4)2

1-Value is % mass 174 2-Value is % mass 176

:S CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD050	VSTD050	DS177	11/21/00	11:47
2	VBLK02	VBLK	DB177	11/21/00	12:17
3	MW-4	MW-4	D2086	11/21/00	16:12
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
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15					
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22					

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Name: AES, Inc. Contract:
Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
File ID (Standard): DS176 Date Analyzed: 11/20/00
trument ID: H5970 D Time Analyzed: 12:22
Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

	IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
12 HOUR STD	11337.	10.26	73240.	11.72	65967.	17.40
UPPER LIMIT	22674.	10.76	146480.	12.22	131934.	17.90
LOWER LIMIT	5669.	9.76	36620.	11.22	32984.	16.90
EPA SAMPLE NO.						
VBLK01	11354.	10.26	71848.	11.73	67121.	17.36
MW-2	10511.	10.27	66366.	11.73	63511.	17.41
MW-3	9555.	10.22	65138.	11.74	58280.	17.42
MW-5	9980.	10.27	61007.	11.69	58417.	17.38
MW-6	10346.	10.24	61340.	11.71	56479.	17.39
MW-7	9201.	10.24	57573.	11.70	53726.	17.39
MW-8	9535.	10.23	62069.	11.70	58906.	17.38
MW-9	10523.	10.27	63259.	11.69	58533.	17.37
FD111700	8931.	10.24	61662.	11.71	58401.	17.39
TB	9729.	10.28	61488.	11.70	58098.	17.38
MW-4 MS	9049.	10.27	62758.	11.74	58647.	17.42
MW-4 MSD	9552.	10.27	64294.	11.74	59696.	17.42
VMSB	9128.	10.26	62871.	11.73	56459.	17.41
MW-1	10358.	10.26	63109.	11.73	60001.	17.41

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Name: AES, Inc. Contract:
Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
File ID (Standard): DS177 Date Analyzed: 11/21/00
trument ID: H5970 D Time Analyzed: 11:47
Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

	IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
12 HOUR STD	12396.	10.26	80860.	11.72	73848.	17.40
UPPER LIMIT	24792.	10.76	161720.	12.22	147696.	17.90
LOWER LIMIT	6198.	9.76	40430.	11.22	36924.	16.90
EPA SAMPLE NO.						
VBLK02	11969.	10.26	78681.	11.72	74088.	17.40
MW-4	10991.	10.25	71687.	11.71	66160.	17.38

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

Volatile Organics IDL

e Performed: 10/30/00

meter	Conc 1 DIDL1	Conc 2 DIDL2	Conc 3 DIDL3	Conc 4 DIDL4	Conc 5 DIDL5	Conc 6 DIDL6	Conc 7 DIDL7	Conc 8 DIDL8	SD	IDL
promethane	36.53	39.31			35.36		39.70		2.116	9.609
momethane	36.25	37.13	35.28		34.83		40.62	39.54	2.339	7.870
yl Chloride	28.94	32.29	32.62		28.97	30.09	32.18	30.24	1.584	4.978
proethane	28.70	25.53	28.95	29.39		29.31	26.29	25.97	1.717	5.397
hylene Chloride		32.22	29.47	30.77	28.34		30.99	31.39	1.399	4.707
tone	39.86		34.12		34.71	34.81	37.79		2.469	9.252
hlorofluoromethane		15.04	17.36	19.97	16.49		17.28	18.76	1.722	5.795
pon Disulfide	20.28			21.32	18.34	18.80		18.96	1.229	4.604
Dichloroethene	17.07		18.36	19.60	17.21	18.19	17.46	16.32	1.070	3.363
Dichloroethane	19.91			21.56	20.78		21.90	19.34	1.079	4.044
s-1,2-Dichloroethene	17.36		19.46	19.14	19.51		19.26		0.899	3.369
1,2-Dichloroethene	20.67		23.45	22.12	20.85	20.57	22.27	20.77	1.102	3.463
proform	21.76			21.72	21.18	22.73		19.69	1.115	4.178
Dichloroethane	17.85	20.77	19.86	18.85	18.62	17.95	19.43	18.23	1.015	3.044
itanone	25.72		25.19		24.65	23.42		20.34	2.147	8.044
l-Trichloroethane	24.08	21.61	23.90	22.92	23.42	23.25	23.51	24.30	0.844	2.529
pon Tetrachloride	22.96	23.26		21.11		22.82	22.47		0.840	3.147
yl Acetate	26.91	27.85	28.42	26.71			28.14	27.18	0.699	2.353
nodichloromethane	24.16	22.18	25.01	22.51	24.49	24.40	22.74	24.13	1.061	3.180
Dichloropropane	23.06		23.38		24.57	25.89	26.07	26.23	1.408	4.739
1,3-Dichloropropene	23.52	22.24	24.00	22.89	21.82	22.74	22.98	23.95	0.776	2.328
chloroethene	24.38	21.98	20.48	22.97	22.72	23.87	21.33	23.58	1.328	3.982
romochloromethane	21.46	18.89	22.74	21.68	20.15	21.08	23.32	21.26	1.389	4.163
2-Trichloroethane	22.59	25.02	26.15	24.43	22.75		24.97		1.395	4.694
zene	22.90	23.09	23.74	22.71	22.83	23.41	23.33	24.41	0.562	1.685
s-1,3-Dichloropropene	23.08	22.89	23.97	23.15	23.22	21.94	22.36	22.37	0.636	1.906
hloroethyl vinyl ether	24.33	23.41	25.78		29.00	28.00	24.86	26.54	2.006	6.304
moform	24.38	26.31	24.63	25.12	25.27	26.33	27.17		1.022	3.213
exanone		25.14	23.25	27.58	27.92		24.73	24.26	1.871	6.296
lethyl-2-pentanone	23.55	24.23	22.75		24.52	22.80	24.37	22.84	0.793	2.493
rachloroethene	22.30	25.71		25.64	23.24	23.33	24.11	24.19	1.261	3.963
2,2-Tetrachloroethane		22.87	21.13	21.89	21.77	20.75	23.70	23.29	1.112	3.494
uene	21.69	22.88	21.37	22.49	22.66	22.00	22.86	22.66	0.569	1.706
orobenzene	22.79	24.30	21.97	22.60	23.17	22.77	23.72	24.17	0.815	2.443
ylbenzene	20.73		20.50	21.09	20.86	20.32	19.85	20.80	0.411	1.293
ene	22.32	24.52	23.65	23.34	23.53	23.12	23.81	24.24	0.680	2.038
p-Xylene	62.71	65.61		61.85	62.49		63.94	64.75	1.453	4.889
ylene	23.76	24.18	24.14	22.93	23.26	21.70	23.70	23.19	0.805	2.413
Dichlorobenzene	22.64	23.30	23.03	20.80	22.73	21.98	22.24	23.23	0.824	2.471
Dichlorobenzene	23.11	25.47	22.97	23.60	24.38	21.89	23.64	23.85	1.051	3.150
Dichlorobenzene	22.49	21.75	21.59	21.20	22.49	21.16	22.33	22.73	0.620	1.858

SAMPLE

DATA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1

Name: AES, Inc. Contract:
Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-1
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: D2078
Level: (low/med) LOW Date Received: 11/17/00
Moisture: not dec._____ Date Analyzed: 11/20/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	7.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1E

EPA SAMPLE NO.

MW-1

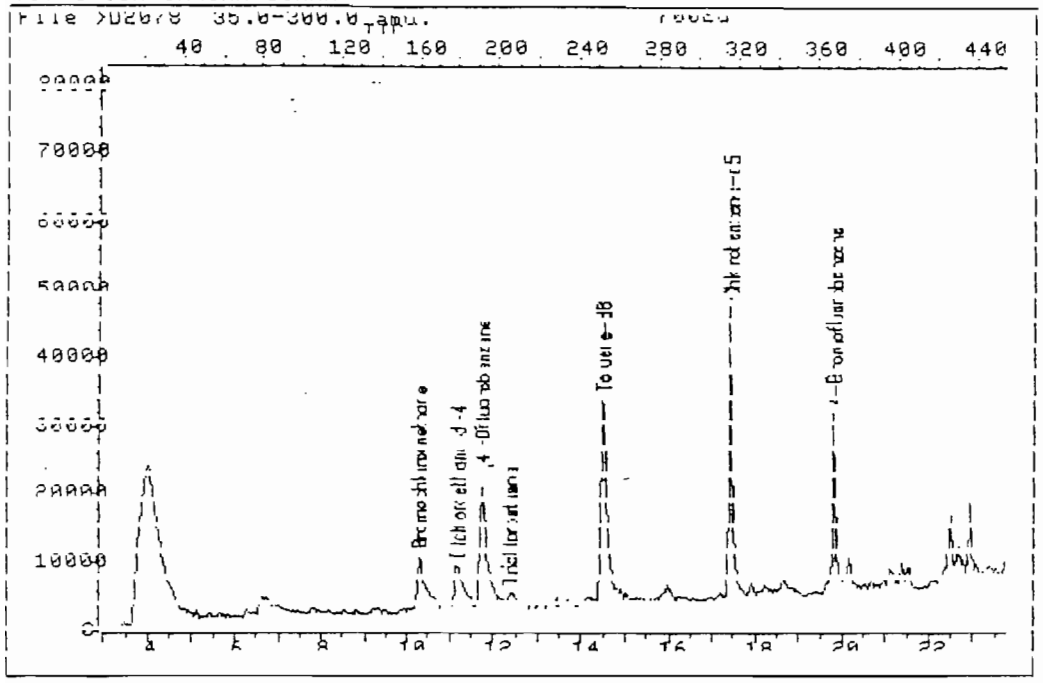
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

b Name: AES, Inc. Contract:
b Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
trix: (soil/water) WATER Lab Sample ID: MW-1
mple wt/vol: 5.000 (g/mL) ML Lab File ID: D2078
vel: (low/med) LOW Date Received: 11/17/00
Moisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

umber TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

TOTAL ION CHROMATOGRAM



Data File: >D2078::D4 Quant Output File: ^D2078::D3
Name: mw-1 Instrument ID: 7002 D
Misc: 7002d

Id File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1120 12:?2

Operator ID: MANAGER
Quant Time : 001120 21:35
Injected at: **1120 21:10

QUANT REPORT Page 1

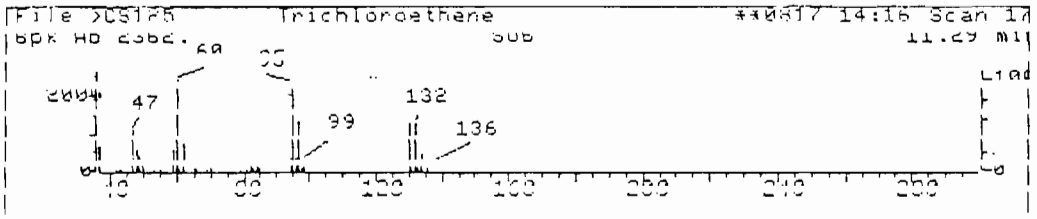
Operator ID: MANAGER Quant Rev: 7 Quant Time: 001120 21:55
Output File: ^D2078::D3 Injected at: **1120 21:10
Data File: >D2078::D4 Dilution Factor: 1.00000
Name: MW-1 Instrument ID: 7002 D
Misc: 7002d 001117AT1

ID File: IDS591::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1120 12:22

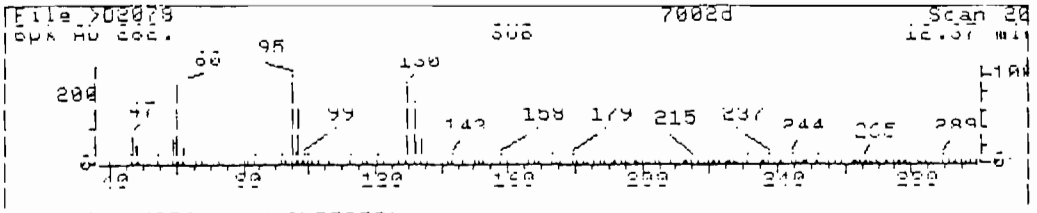
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.26	128.0	10358	50.00	UG	99
19)	1,2-Dichloroethane-d4	11.18	65.0	35214	48.32	UG	100
22)	*1,4-Difluorobenzene	11.73	114.0	63109	50.00	UG	95
29)	Trichloroethene	12.37	130.0	2666	6.58	UG	65
36)	*Chlorobenzene-d5	17.41	117.0	60001	50.00	UG	92
42)	Toluene d-8	14.47	98.0	85422	50.51	UG	93
48)	Bromofluorobenzene	19.79	95.0	29195	52.42	UG	45

* Compound is ISTD

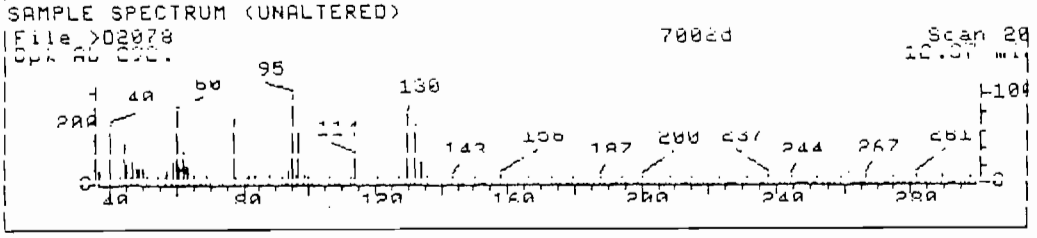
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >D2078::D4
Name: mw-1
Misc: 7002d
Quant Time: 001120 21:35
Injected at: **1120 21:10
Last Qcal Time: **1120 12:22

Quant Output File: ^D2078::D3
Instrument ID: 7002 D

Quant ID File: IDS591::MT
Last Calibration: 000616 12:38

Compound No : 29
Compound Name : Trichloroethene
Scan Number : 206
Retention Time: 12.37 min.
Quant Ion : 130.0
Area : 2666
Concentration : 6.58 UG
q-value : 65

MS data file header from : >D2078::D4

Sample: Operator: MANHEIER SUPER GRP. 11/20/00 21:10
Misc : 7002d
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7002 D
Method file: METH04 Tuning file: MT900D No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	250.	250.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0

>D2078 7002d
35.01 300.0 CLP TIC
Upslope: .2000 Area Reject: 12975. Max Peaks: 8 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File ID2078 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	4.00	13	23	46	23475	866464	789780	100.00	73.411
2	6.28	71	73	77	1278	45459	14292	1.81	1.328
3	6.74	77	83	94	2671	177785	65933*	8.35	6.129
4	15.98	282	285	289	2058	109009	15675	1.98	1.457
5	18.64	341	343	353	2706	212335	38793	4.91	3.606
6	21.07	395	396	400	2255	112760	18497	2.34	1.719
7	22.49	423	427	429	8285	189548	46900	5.94	4.359
8	22.95	434	437	442	11850	256545	85960	10.88	7.990

Sum of corrected areas: 1075830.

Summary of Unknowns PBM Library Search and Quantitation

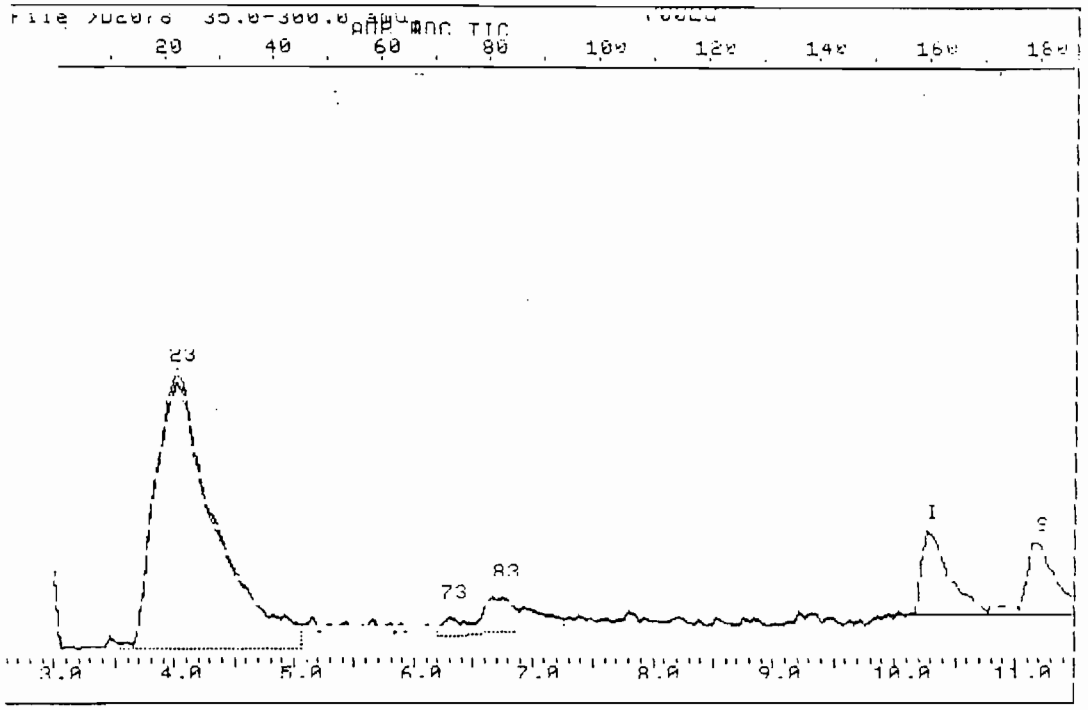
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	129747.	10.26	3.00 - 10.99
2	50.0	221292.	11.73	10.99 - 14.57
3	50.0	296298.	17.41	14.57 - 23.77

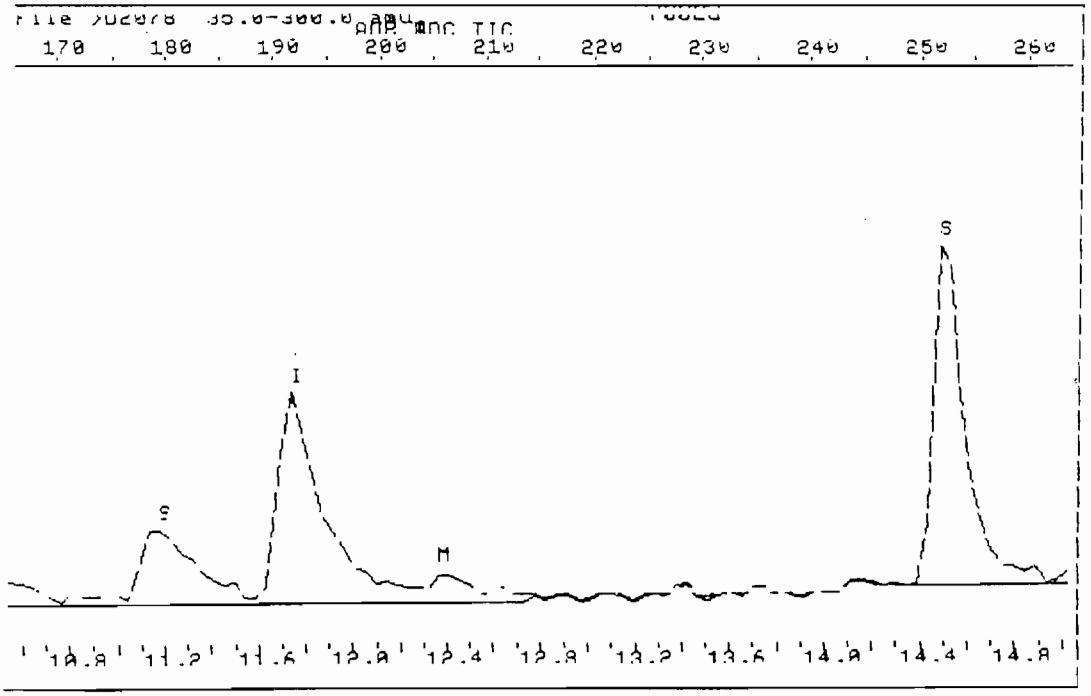
Dilution Factor = 1.00 This sample was 1000.00 g or mL

Correction Factor = 1.00

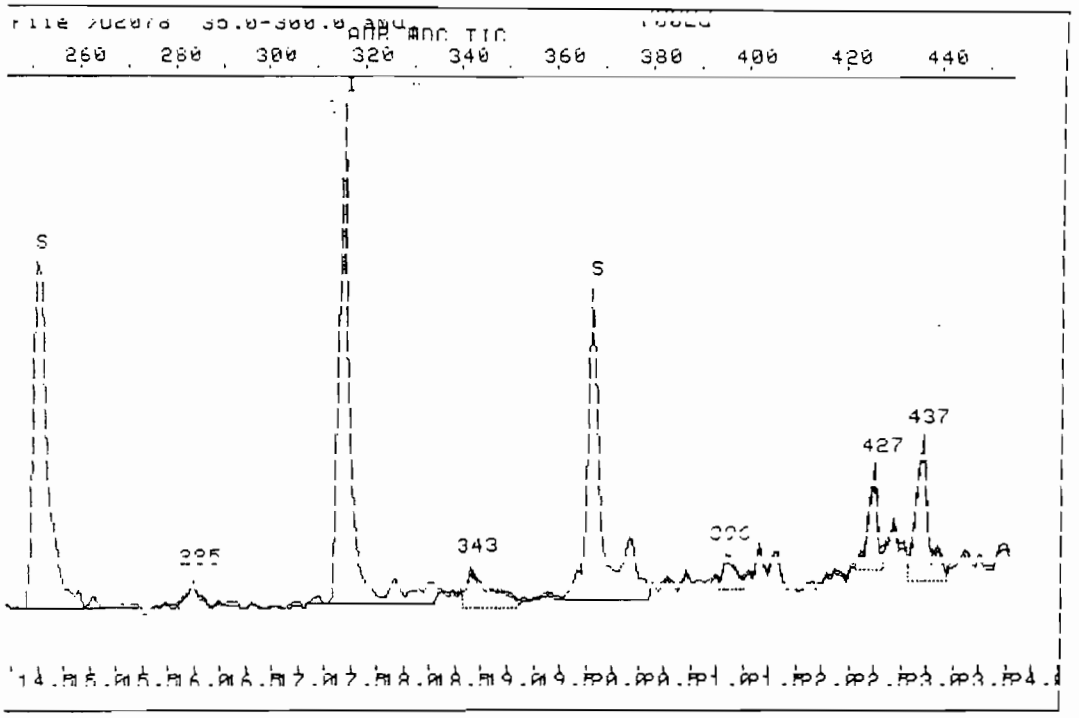
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

2:06 PM WED., 29 NOV., 2000





Instrument ID: 7002 Analyzed on: 11/20/00 21:10



Instrument ID: 7002 Analyzed on: 11/20/00 21:10

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2

Name: AES, Inc. Contract:

Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1

rix: (soil/water) WATER Lab Sample ID: MW-2

ple wt/vol: 5.000 (g/mL) ML Lab File ID: D2065

el: (low/med) LOW Date Received: 11/17/00

oisture: not dec._____ Date Analyzed: 11/20/00

Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	4.	J
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	42.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

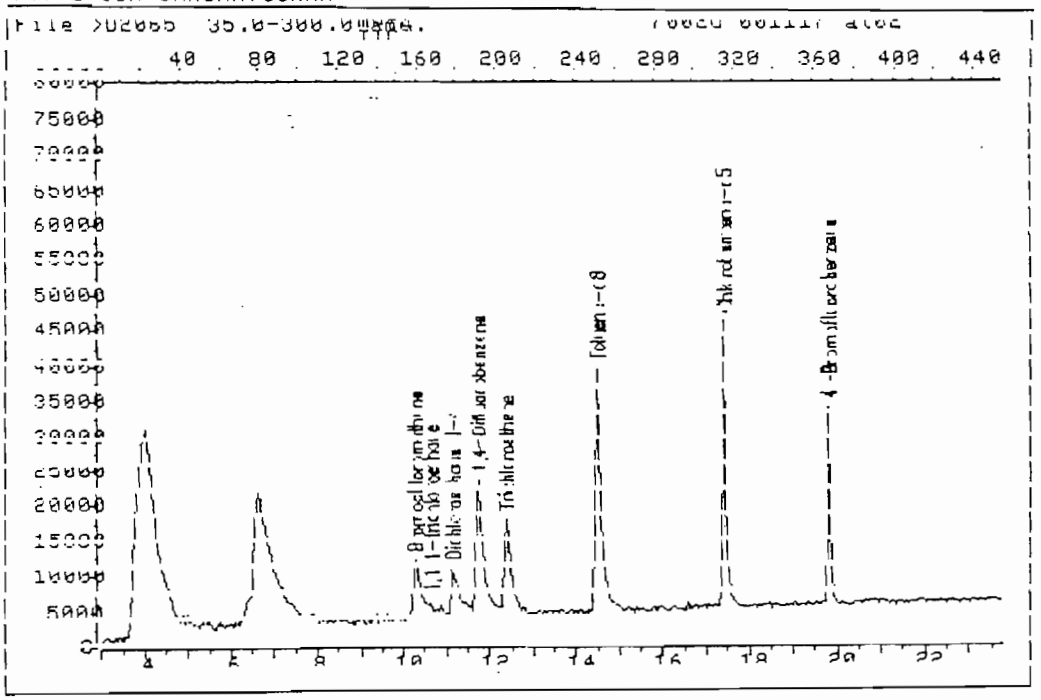
MW-2

) Name: AES, Inc. Contract:
) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
:rix: (soil/water) WATER Lab Sample ID: MW-2
ıple wt/vol: 5.000 (g/mL) ML Lab File ID: D2065
'el: (low/med) LOW Date Received: 11/17/00
foisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
.l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

ımber TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	76-13-1	Ethane,1,1,2-Trichloro,1,2,2	6.65	220	JN
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					

TOTAL ION CHROMATOGRAM



Data File: >D2065::D4 Quant Output File: ^D2065::D3
Name: mw-2 Instrument ID: 7002 D
Misc: 7002d 001117 at02

Id File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1120 12:22

Operator ID: MANAGER
Quant Time : 001120 15:13
Injected at: **1120 14:49

QUANT REPORT Page 1

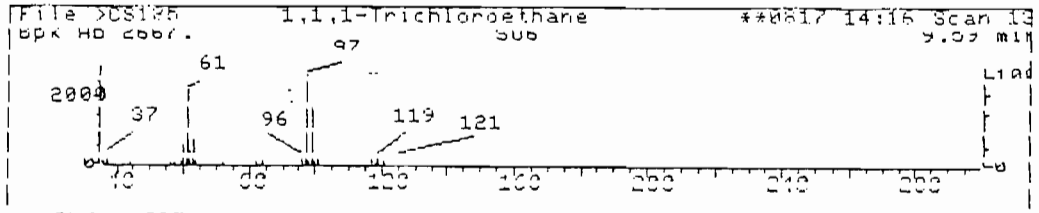
Operator ID: MANAGER Quant Rev: 7 Quant Time: 001120 15:13
Output File: ^D2065::D3 Injected at: **1120 14:49
Data File: >D2065::D4 Dilution Factor: 1.00000
Name: mw-2 Instrument ID: 7002 D
Misc: 7002d 001117 at02

ID File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1120 12:22

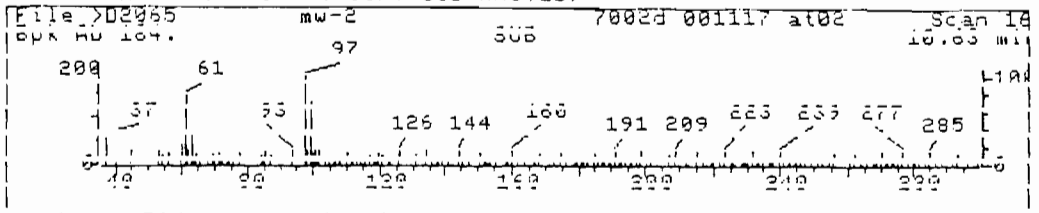
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.27	128.0	10511	50.00	UG	98
19)	1,2-Dichloroethane-d4	11.14	65.0	36203	48.95	UG	100
22)	*1,4-Difluorobenzene	11.73	114.0	66366	50.00	UG	95
23)	1,1,1-Trichloroethane	10.63	97.0	2891	3.58	UG	99
29)	Trichloroethene	12.37	130.0	17837	41.86	UG	94
36)	*Chlorobenzene-d5	17.41	117.0	63511	50.00	UG	92
42)	Toluene d-8	14.48	98.0	89788	50.16	UG	93
48)	Bromofluorobenzene	19.80	95.0	30682	52.04	UG	40

* Compound is ISTD

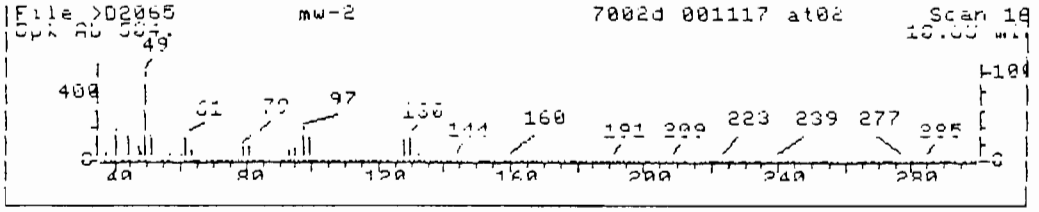
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



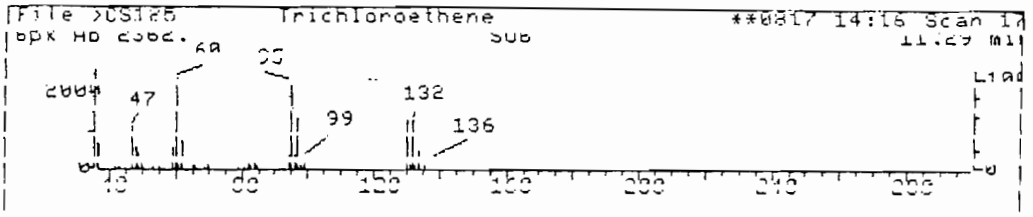
SAMPLE SPECTRUM (UNALTERED)



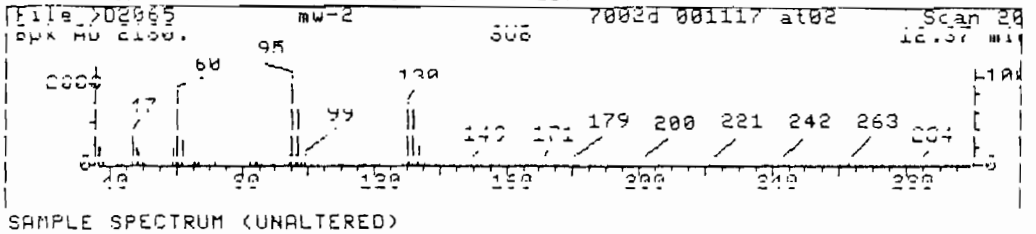
Data File: >D2065::D4 Quant Output File: ^D2065::D3
Name: mw-2 Instrument ID: 7002 D
Misc: 7002d 001117 at02
Quant Time: 001120 15:13 Quant ID File: IOSS91::MT
Injected at: **1120 14:49 Last Calibration: 000616 12:38
Last Qcal Time: **1120 12:22

Compound No : 23
Compound Name : 1,1,1-Trichloroethane
Scan Number : 168
Retention Time: 10.63 min.
Quant Ion : 97.0
Area : 2851
Concentration : 3.58 UG
q-value : 99

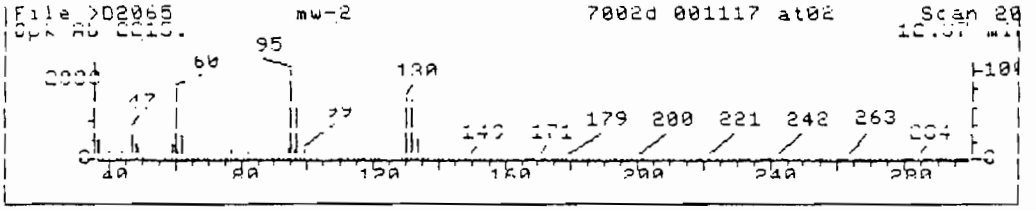
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >D2065::D4
Name: mw-2
Misc: 7002d 001117 at02
Quant Time: 001120 15:13
Injected at: **1120 14:49
Last Qcal Time: **1120 12:22

Quant Output File: ^D2065::D3
Instrument ID: 7002 D
Quant ID File: IDSS91::MT
Last Calibration: 000616 12:38

Compound No : 29
Compound Name : Trichloroethene
Scan Number : 206
Retention Time: 12.37 min.
Quant Ion : 130.0
Area : 17837
Concentration : 41.86
q-value : 94

MS data file header from : >D2065::D4

Sample: mw-2 Operator: MANAGER SUPER GRP. 11/21/00 14:49
Misc : 7002d 001117 at02
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7002 D
Method file: METH04 Tuning file: MT900D No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	250.	230.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0

>D2065 mw-2 7002d 001117 at02
35.01 300.0 CLP TIC
Upslope: .2000 Area Reject: 13986. Max Peaks: 3 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File ID2065 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	4.00	11	23	43	30326	1106124	1027310	100.00	62.112
2	5.42	51	54	58	1596	63026	17477	1.70	1.057
3	6.65	68	81	104	19196	890366	609181	59.30	36.8

Sum of corrected areas: 1653968.

F220 ug/L

Summary of Unknowns PBM Library Search and Quantitation

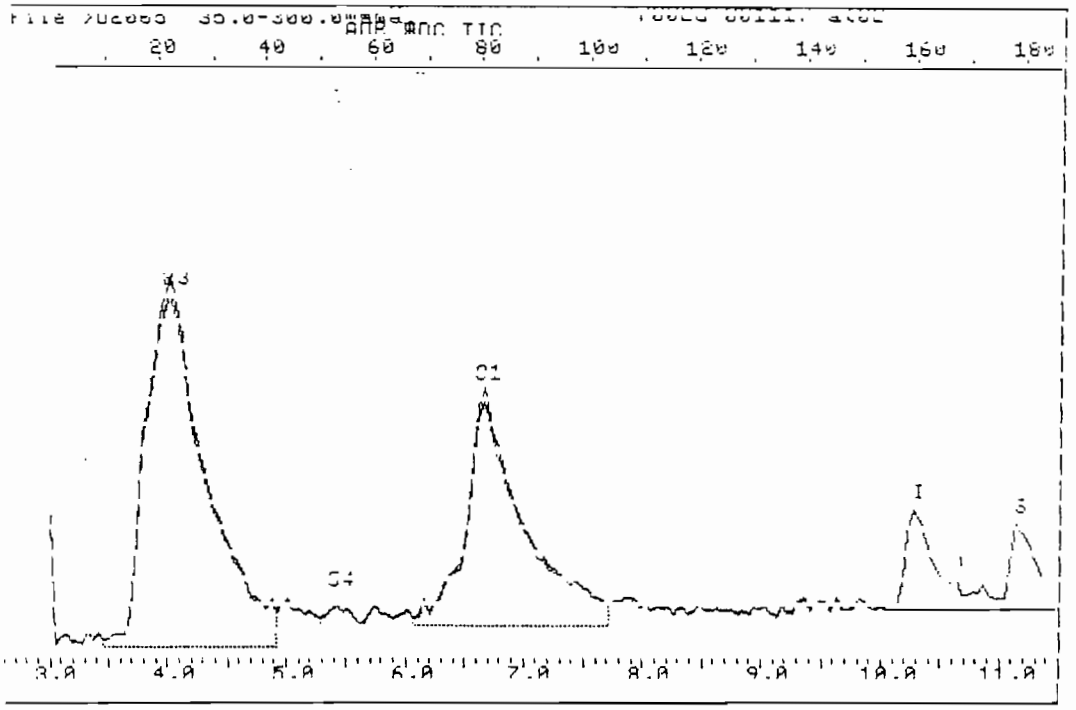
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	139855.	10.27	3.00 - 11.00
2	50.0	236354.	11.73	11.00 - 14.57
3	50.0	288599.	17.41	14.57 - 23.78

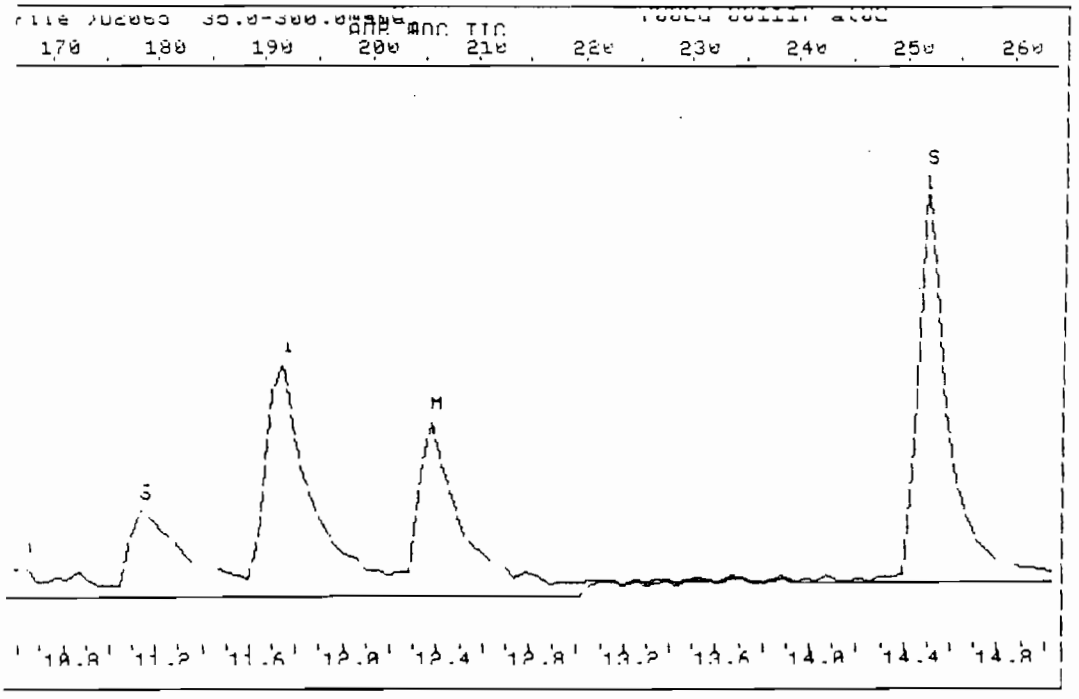
Dilution Factor = 1.00 This sample was 1000.00 g or mL

Correction Factor = 1.00

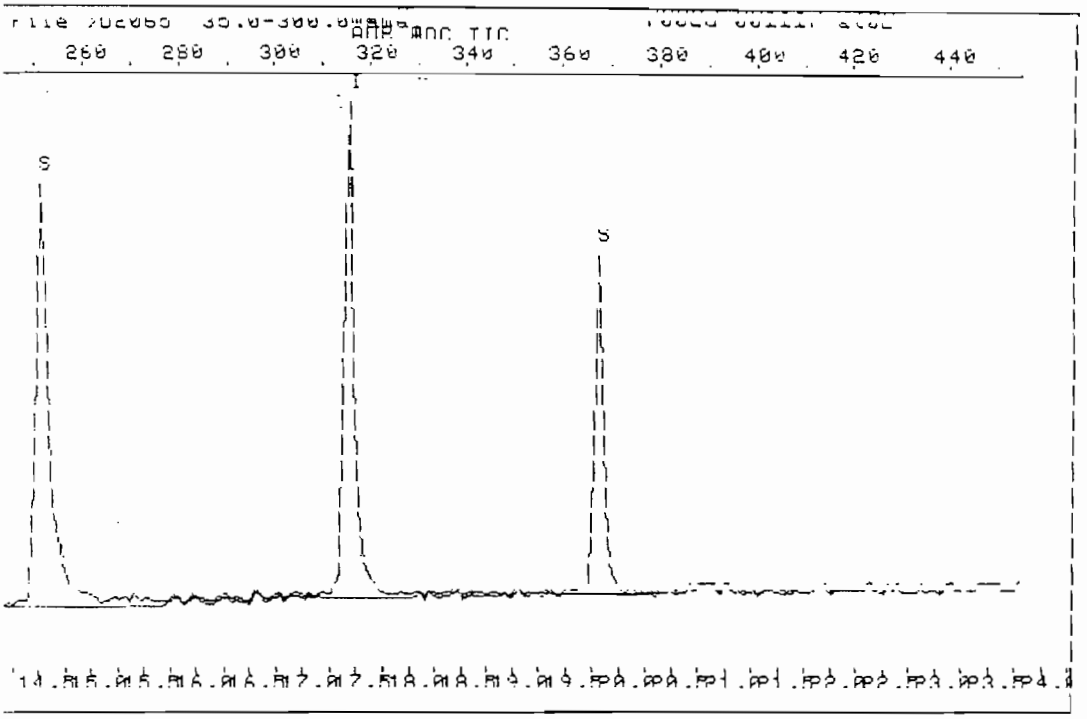
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

12:01 PM WED., 29 NOV., 2000

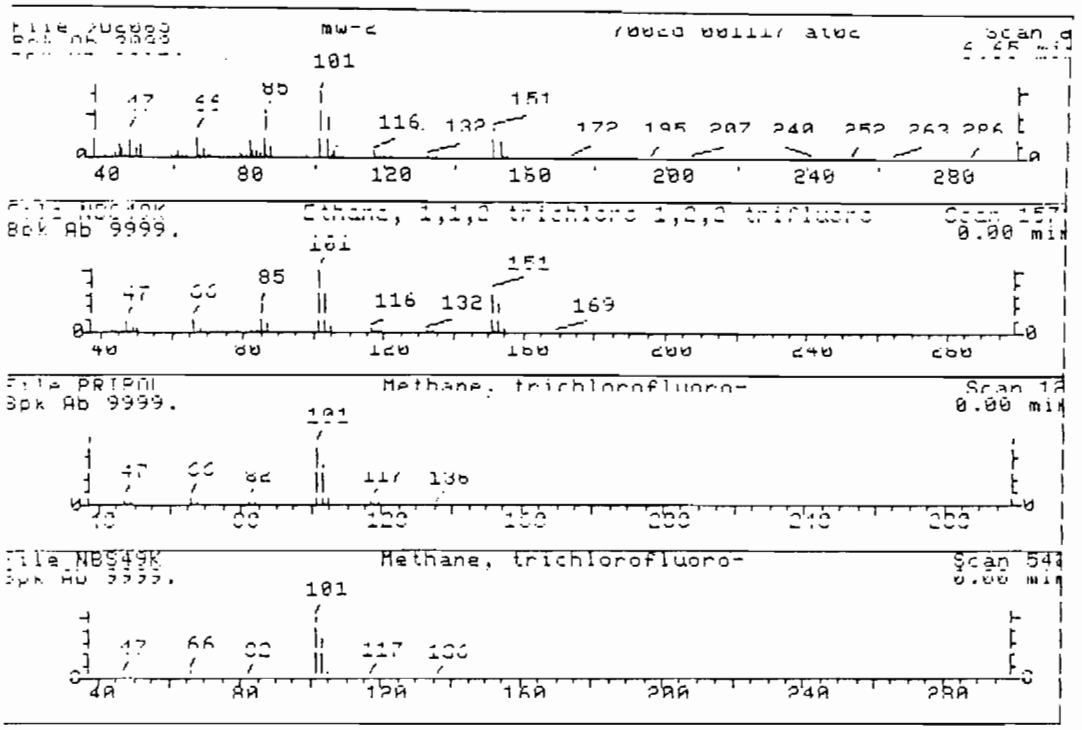




Instrument ID: 7002 Analyzed on: 11/20/00 14:49



Instrument ID: 7002 Analyzed on: 11/20/00 14:49



From 113 = 220 ug/L

1.	Ethane, 1,1,2-trichloro-1,2,2-trifluoro-	186 C2Cl3F3
2.	Methane, trichlorofluoro-	136 CCl3F
3.	Methane, trichlorofluoro-	136 CCl3F
4.	Methane, trichlorofluoro-	136 CCl3F
5.	Methane, trichlorofluoro-	136 CCl3F
6.	Methane, trichlorofluoro-	136 CCl3F

Sample file: >D2065 Spectrum #: 81
Search speed: 1 Tilting option: F No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	IV
1.	78	76131	10367	NBS49K	107	31	3	4	97	1	55			19
2.	20	128	164	PRIPOL	39	57	0	0	92	54	5			18
3.	20	75694	10283	NBS49K	39	57	0	0	92	54	5			18
4.	20	127	163	PRIPOL	40	61	0	0	100	51	5			16
5.	20	126	162	PRIPOL	35	58	0	0	90	54	5			17
6.	20	125	161	PRIPOL	34	59	0	0	95	54	5			17

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-3

) Name: AES, Inc. Contract:
) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
:rix: (soil/water) WATER Lab Sample ID: MW-3
ıple wt/vol: 5.000 (g/mL) ML Lab File ID: D2066
/el: (low/med) LOW Date Received: 11/17/00
loisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
.l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	3.	J
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	16.	
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	170.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

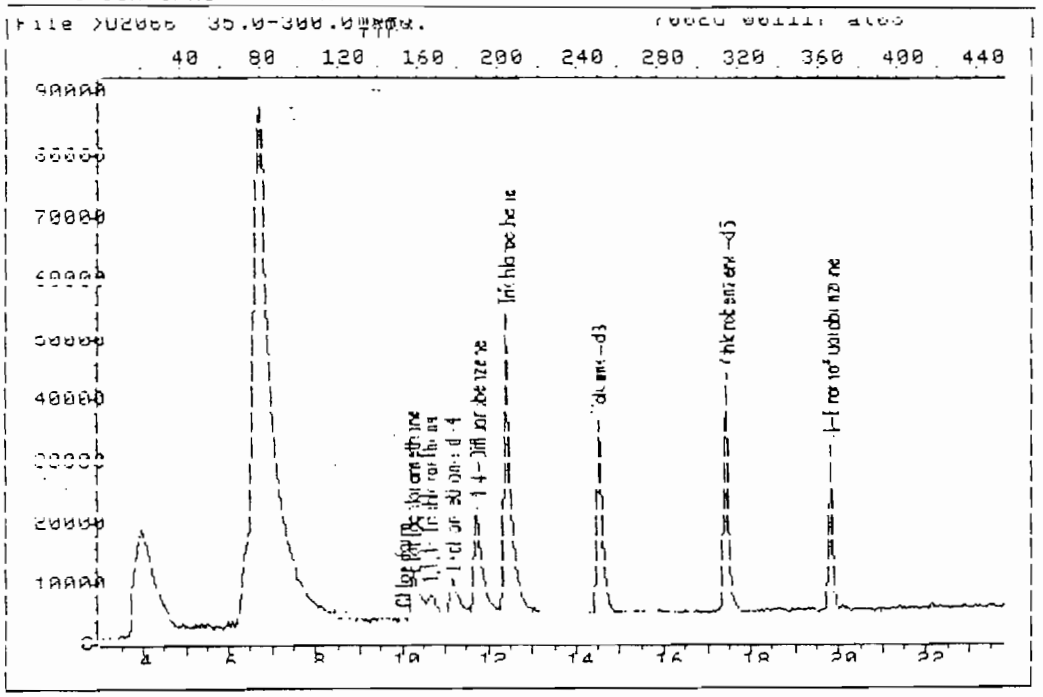
MW-3

) Name: AES, Inc. Contract:
) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
.rix: (soil/water) WATER Lab Sample ID: MW-3
ıple wt/vol: 5.000 (g/mL) ML Lab File ID: D2066
'el: (low/med) LOW Date Received: 11/17/00
loisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
.l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

ımber TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	76-13-1	Ethane,1,1,2-Trichloro,1,2,2	6.65	600	JN
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
.0.					
.1.					
.2.					
.3.					
.4.					
.5.					
.6.					
.7.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

TOTAL ION CHROMATOGRAM



Data File: >D2066::D4 Quant Output File: ^D2066::D3
Name: mw-3 Instrument ID: 7002 D
Misc: 7002d 001117 at03

Id File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1120 12:22

Operator ID: MANAGER
Quant Time : 001120 15:43
Injected at: **1120 15:18

QUANT REPORT

Operator ID: MANAGER
Output File: ^D2066::D3
Data File: >D2066::D4
Name: mw-3
Misc: 7002d 001117 at03

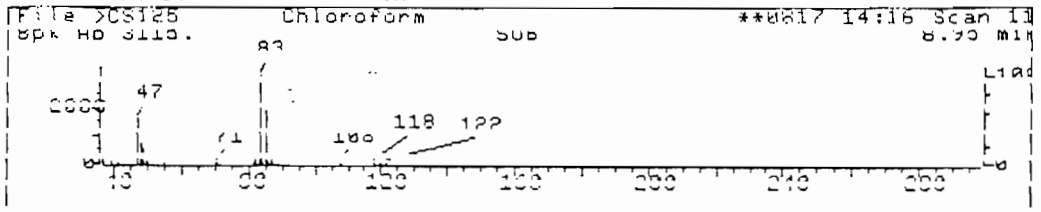
Quant Rev: 7
Quant Time: 001120 15:43
Injected at: **1120 15:18
Dilution Factor: 1.00000
Instrument ID: 7002 D

ID File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38
Last Qcal Time: **1120 12:22

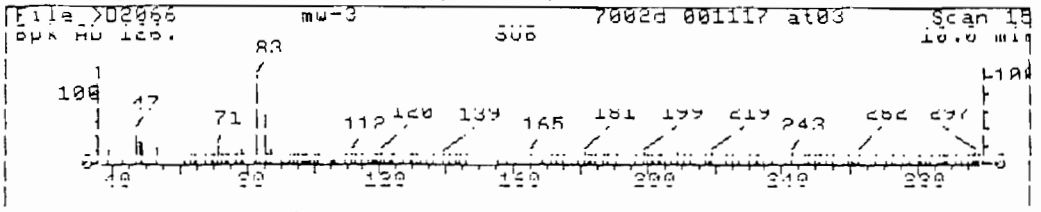
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.22	128.0	9555	50.00	UG	82
18)	Chloroform	10.00	83.0	3145	3.47	UG	88
19)	1,2-Dichloroethane-d4	11.14	65.0	34596	51.46	UG	100
22)	*1,4-Difluorobenzene	11.74	114.0	65138	50.00	UG	96
23)	1,1,1-Trichloroethane	10.64	97.0	12558	16.06	UG	87
29)	Trichloroethene	12.38	130.0	69358	165.85	UG	90
36)	*Chlorobenzene-d5	17.42	117.0	58280	50.00	UG	95
42)	Toluene d-8	14.49	98.0	85138	51.83	UG	92
48)	Bromofluorobenzene	19.80	95.0	29218	54.01	UG	41

* Compound is ISTD

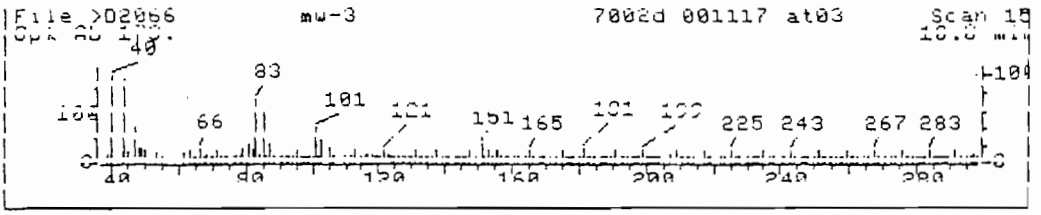
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



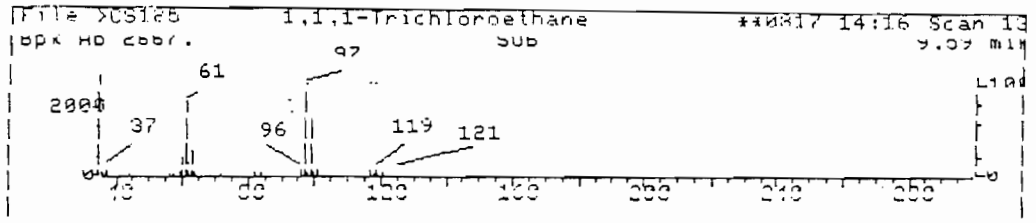
Data File: >D2066::D4
Name: mw-3
Misc: 7002d 001117 at03
Quant Time: 001120 15:43
Injected at: **1120 15:18
Last Qcal Time: **1120 12:22

Quant Output File: ^D2066::D3
Instrument ID: 7002 D

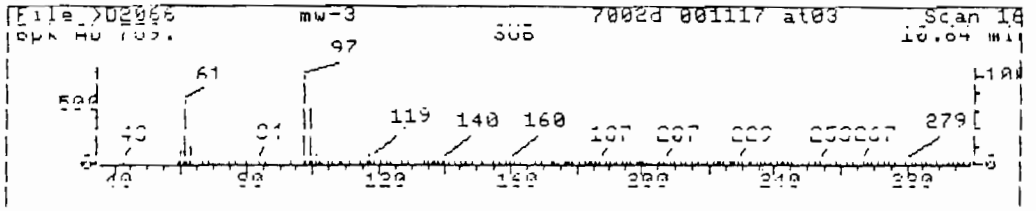
Quant ID File: IDSS91::MT
Last Calibration: 000616 12:38

Compound No : 18
Compound Name : Chloroform
Scan Number : 153
Retention Time: 10.00 min.
Quant Ion : 83.0
Area : 3145
Concentration : 3.47 UG
q-value : 88

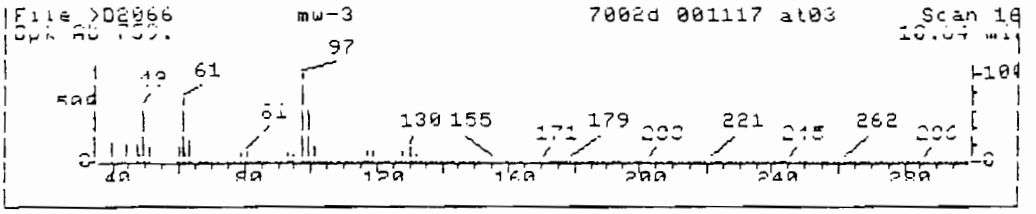
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



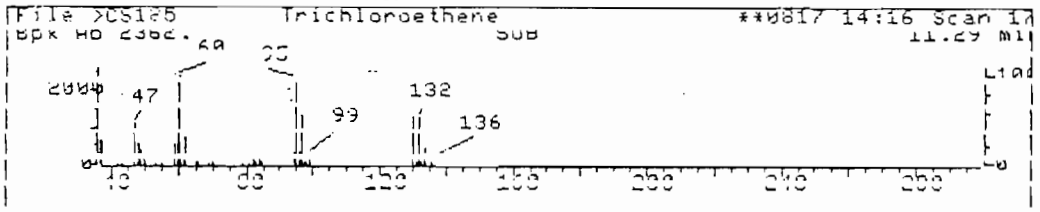
SAMPLE SPECTRUM (UNALTERED)



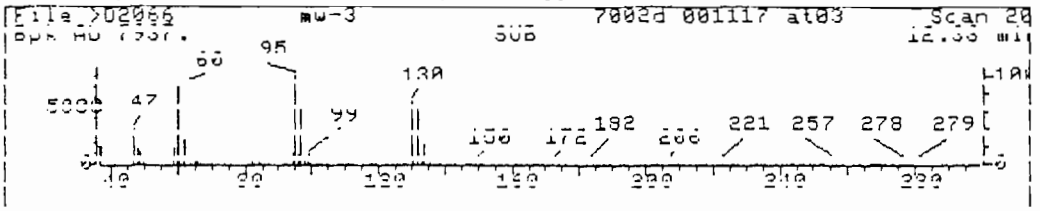
Data File: >D2066::D4 Quant Output File: ^D2066::D3
Name: mw-3 Instrument ID: 7002 D
Misc: 7002d 001117 at03
Quant Time: 001120 15:43 Quant ID File: IDSS91::MT
Injected at: **1120 15:18 Last Calibration: 000616 12:38
Last Qcal Time: **1120 12:22

Compound No : 23
Compound Name : 1,1,1-Trichloroethane
Scan Number : 167
Retention Time: 10.64 min.
Quant Ion : 97.0
Area : 12538
Concentration : 16.06 UG
q-value : 87

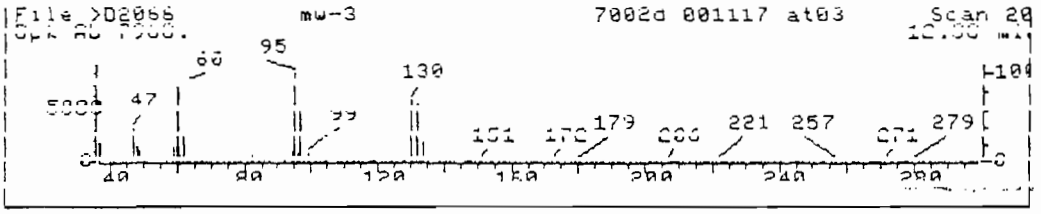
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >D2066::D4
Name: mw-3
Misc: 7002d 001117 at03
Quant Time: 001120 15:43
Injected at: **1120 15:18
Last Qcal Time: **1120 12:22

Quant Output File: ^D2066::D3
Instrument ID: 7002 D
Quant ID File: IDSS91::MT
Last Calibration: 000616 12:38

Compound No : 29
Compound Name : Trichloroethene
Scan Number : 205
Retention Time: 12.38 min.
Quant Ion : 130.0
Area : 69358
Concentration : 165.85 UG
q-value : 90

MS data file header from : >D2066::D4

Sample: mw-3 Operator: MANAGER SUPER GRP. 11/20/00 15:18
Misc : 7002d 001117 at03
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7002 D
Method file: METH04 Tuning file: MT900D No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	230.	230.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0

>D2066 mw-3 7002d 001117 at03
35.01 300.0 CLP TIC
Unslope: .2000 Area Reject: 23734. Max Peaks: 2 Bunch: -1 Valley >100 %
Onslope: 0.0000 Results File ID2066 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	3.96	12	21	40	17934	690098	613982	21.53	17.717
2	6.65	67	80	118	85118	3234222	2851467	100.00	82.283

Sum of corrected areas: 3465449.

Summary of Unknowns PBM Library Search and Quantitation

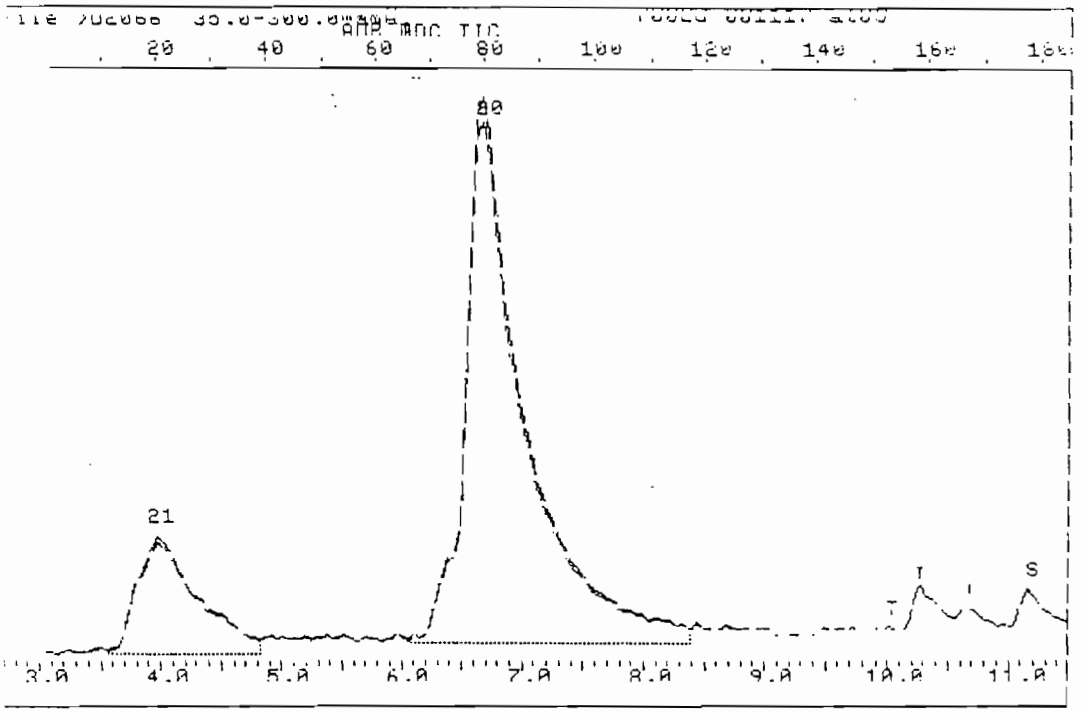
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	237335.	10.22	3.04 - 10.98
2	50.0	237335.	11.74	10.98 - 14.58
3	50.0	273070.	17.42	14.58 - 23.79

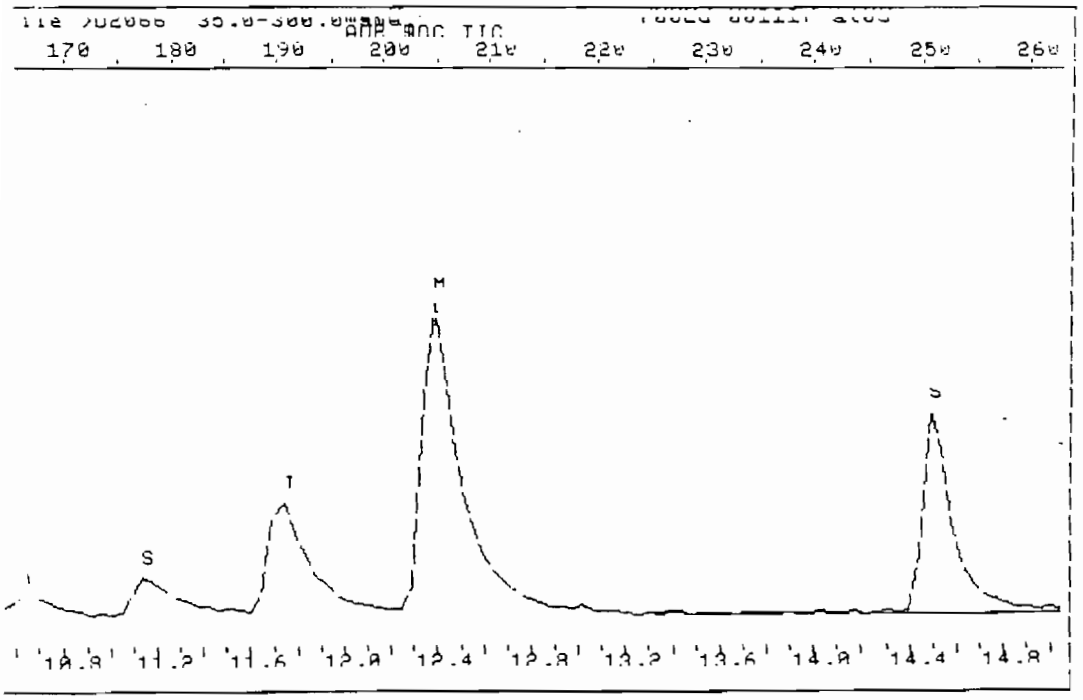
Dilution Factor = 1.00 This sample was 1000.00 g or mL

Correction Factor = 1.00

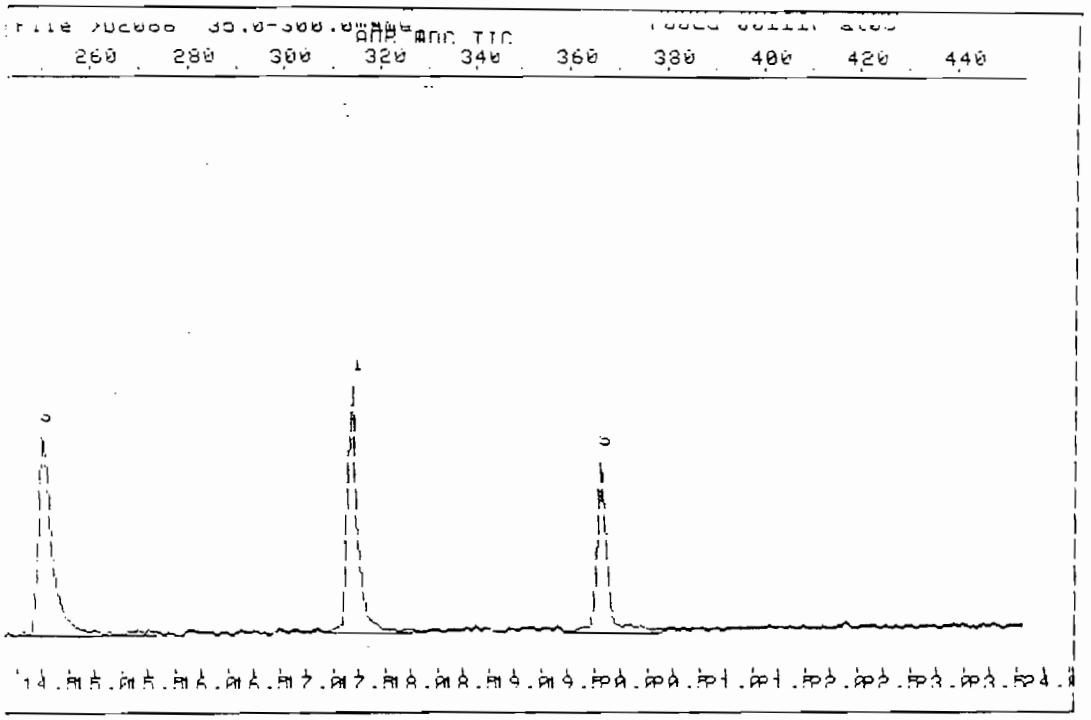
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

12:08 PM WED., 29 NOV., 2000

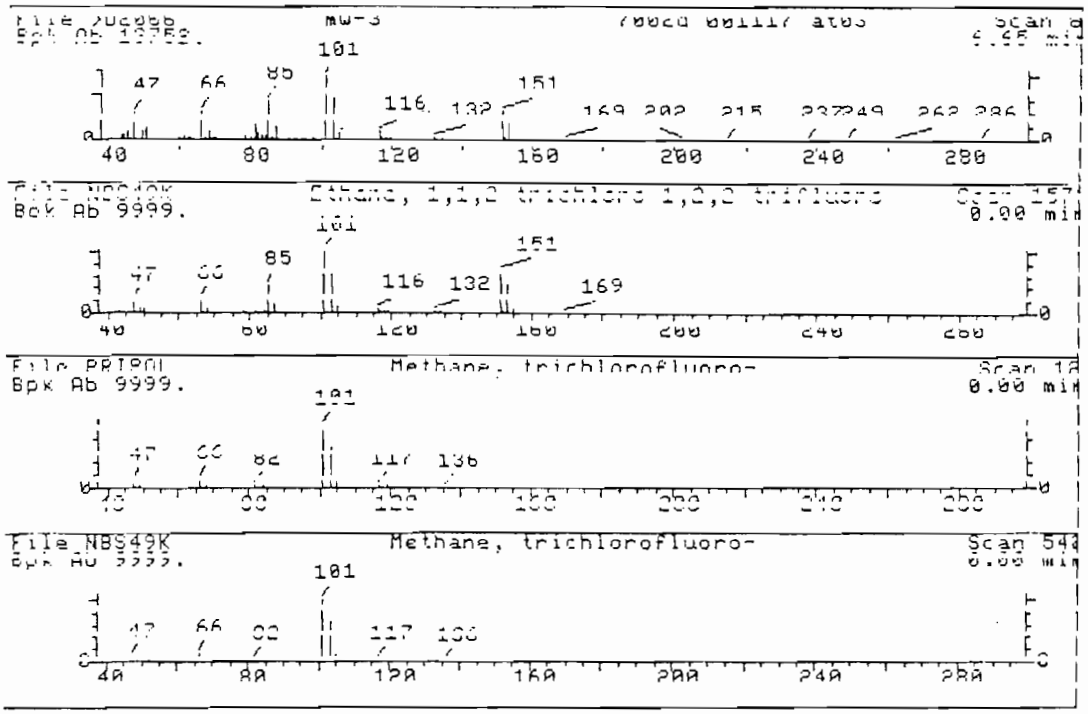




Instrument ID: 7002 Analyzed on: 11/20/00 15:18



Instrument ID: 7002 Analyzed on: 11/20/00 15:18



Area 113
= 600 mg/L

1.	Ethane, 1,1,2-trichloro-1,2,2-trifluoro-	186 C2Cl3F3
2.	Methane, trichlorofluoro-	136 CCl3F
3.	Methane, trichlorofluoro-	136 CCl3F
4.	Methane, trichlorofluoro-	136 CCl3F
5.	Methane, trichlorofluoro-	136 CCl3F

Sample file: >D2066 Spectrum #: 80
Search speed: 1 Tilting option: F No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	IV
1.	87	76131	10367	NBS49K	116	22	2	4	100	2	63			48
2.	24	128	164	PRIPOL	55	41	2	4	100	41	8			12
3.	24	75694	10283	NBS49K	55	41	2	4	100	41	8			12
4.	15	125	161	PRIPOL	39	54	1	0	100	60	3			13
5.	15	127	163	PRIPOL	39	62	0	0	100	57	3			1

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4

) Name: AES, Inc. Contract:
) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
rix: (soil/water) WATER Lab Sample ID: MW-4
ple wt/vol: 5.000 (g/mL) ML Lab File ID: D2086
el: (low/med) LOW Date Received: 11/17/00
loisture: not dec._____ Date Analyzed: 11/21/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
1 Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

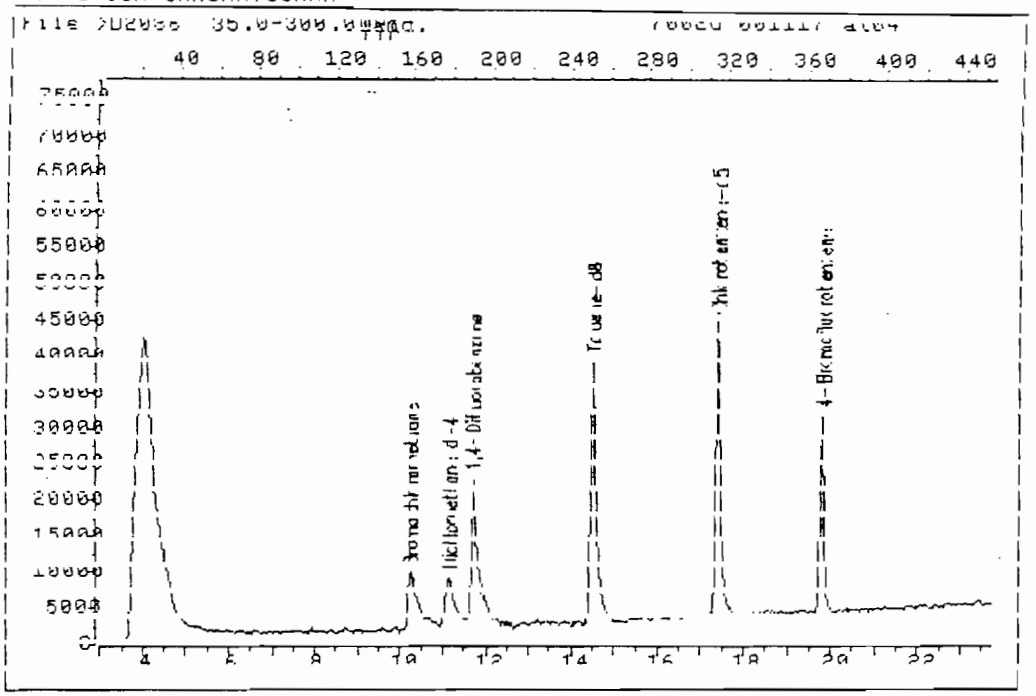
MW-4

) Name: AES, Inc. Contract:
) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
:rix: (soil/water) WATER Lab Sample ID: MW-4
nple wt/vol: 5.000 (g/mL) ML Lab File ID: D2086
vel: (low/med) LOW Date Received: 11/17/00
Moisture: not dec._____ Date Analyzed: 11/21/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
umber TICs found: 0 (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

TOTAL ION CHROMATOGRAM



Data File: >D2086::D4 Quant Output File: ^D2086::D3
Name: mw-4 Instrument ID: 7002 D
Misc: 7002d 001117 at04

Id File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1121 11:47

Operator ID: MANAGER
Quant Time : 001121 16:36
Injected at: **1121 16:12

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 001121 16:56
Output File: ^D2086::D3 Injected at: **1121 16:12
Data File: >D2086::D4 Dilution Factor: 1.00000
Name: mw-4 Instrument ID: 7002 D
Misc: 7002d 001117 at04

ID File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1121 11:47

	Compound	R.T.	Q Ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.25	128.0	10991	50.00	UG	91
19)	1,2-Dichloroethane-d4	11.16	65.0	39054	49.28	UG	100
22)	*1,4-Difluorobenzene	11.71	114.0	71687	50.00	UG	95
36)	*Chlorobenzene-d5	17.38	117.0	66160	50.00	UG	94
42)	Toluene d-8	14.50	98.0	97432	51.19	UG	94
48)	Bromofluorobenzene	19.81	95.0	32371	50.48	UG	36

* Compound is ISTD

MS data file header from : >D2086::D4

Sample: mw-4 Operator: MANAGER SUPER GRP. 11/21/00 16:12
Misc : 7002d 001117 at04
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7002 D
Method file: METH04 Tuning file: MT900D No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	230.	230.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0

>D2086 mw-4 7002d 001117 at04
35.01 300.0 CLP TIC
Upslope: .2000 Area Reject: 15166. Max Peaks: 2 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File ID2086 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	4.00	8	23	59	42137	1538112	1494462	100.00	98.726
2	13.22	218	225	227	1423	72177	19287	1.29	1.274

Sum of corrected areas: 1513749.

Summary of Unknowns PBM Library Search and Quantitation

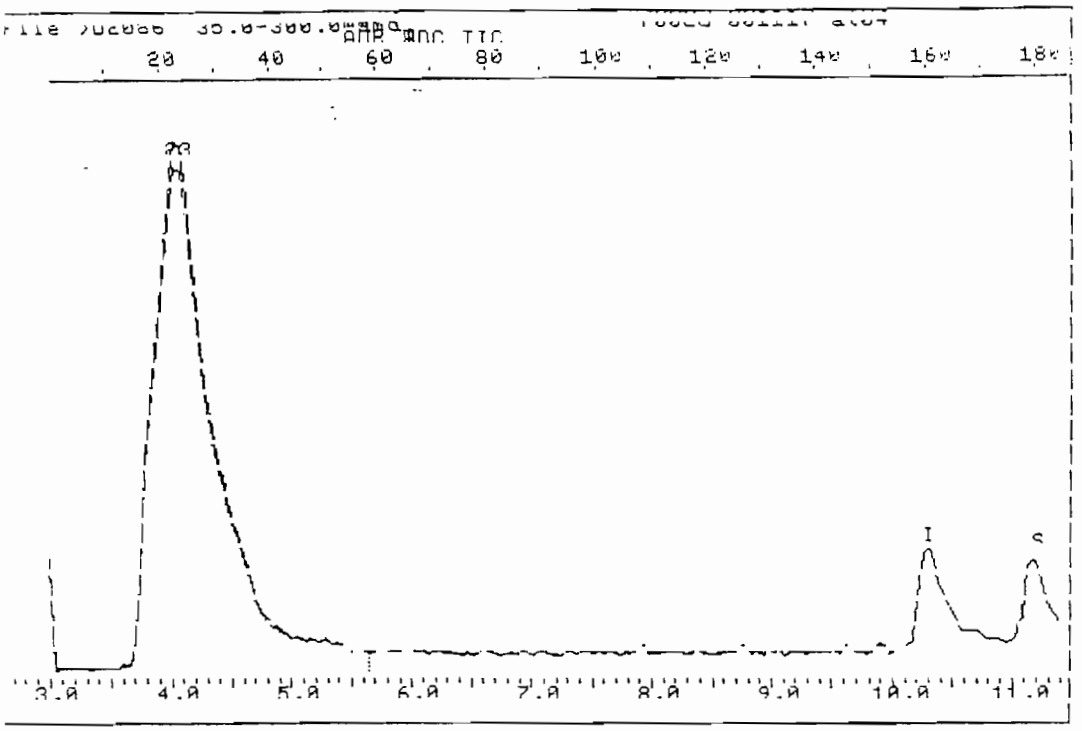
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	151659.	10.25	3.00 - 10.98
2	50.0	275104.	11.71	10.98 - 14.55
3	50.0	310779.	17.38	14.55 - 23.75

Dilution Factor = 1.00 This sample was 1000.00 g or mL

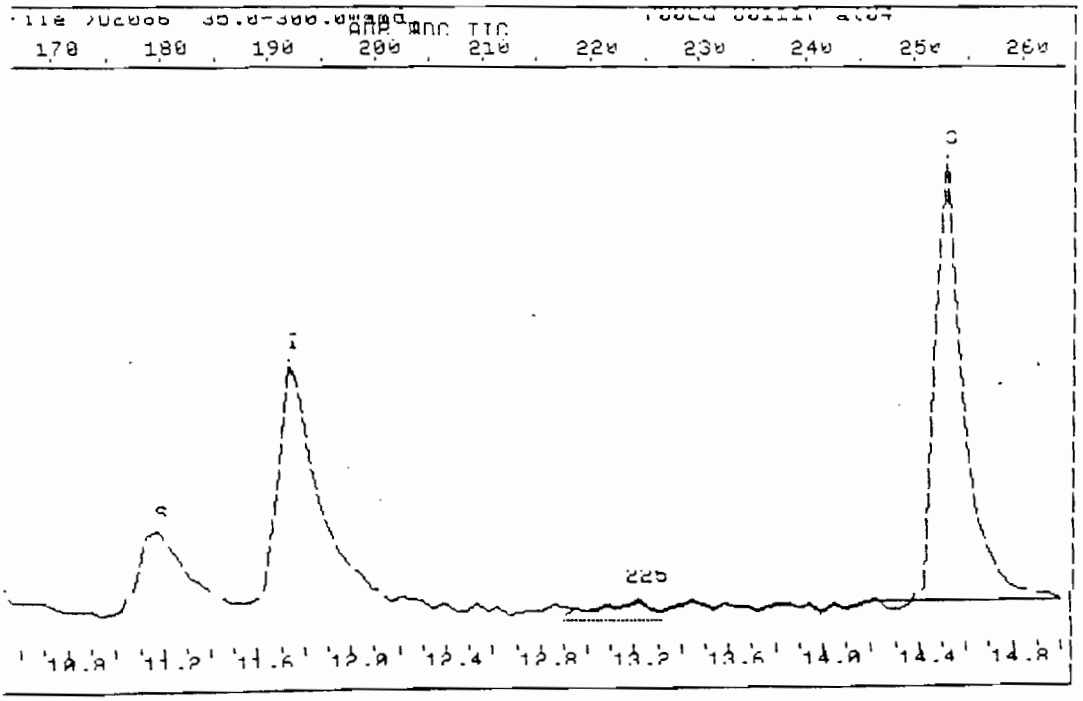
Correction Factor = 1.00

$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

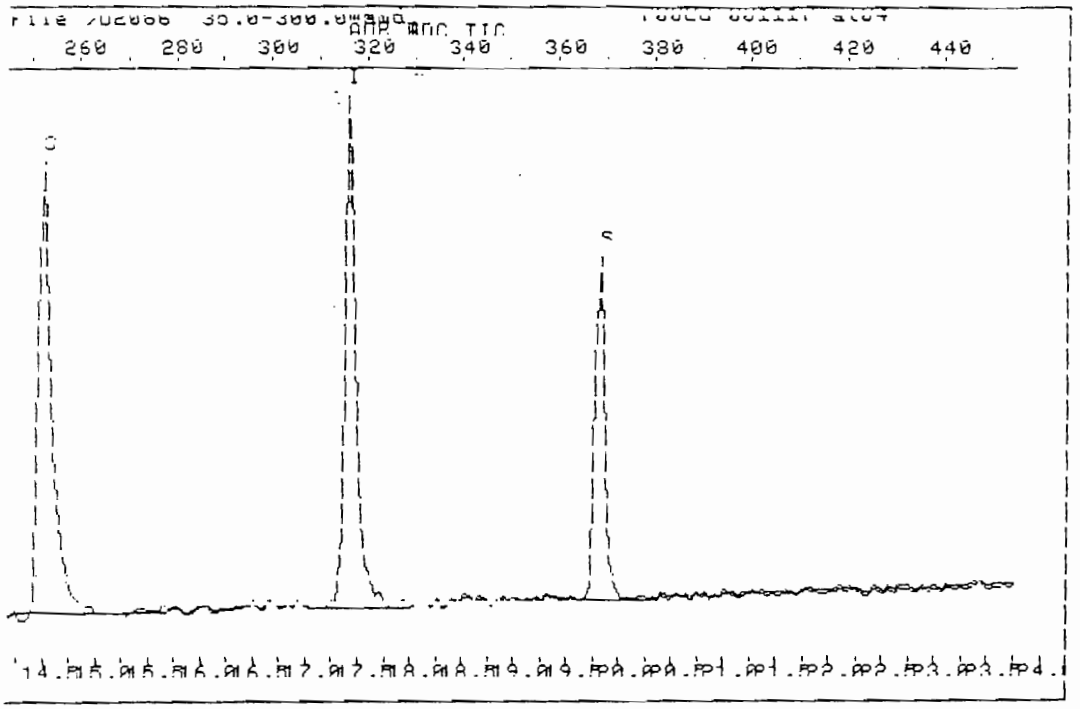
1:34 PM WED., 29 NOV., 2000



*1A



Instrument ID: 7002 Analyzed on: 11/21/00 16:12



Instrument ID: 7002 Analyzed on: 11/21/00 16:12

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5

Name: AES, Inc. Contract:
Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
rix: (soil/water) WATER Lab Sample ID: MW-5
ple wt/vol: 5.000 (g/mL) ML Lab File ID: D2068
el: (low/med) LOW Date Received: 11/17/00
oisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	2.	J
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	29.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

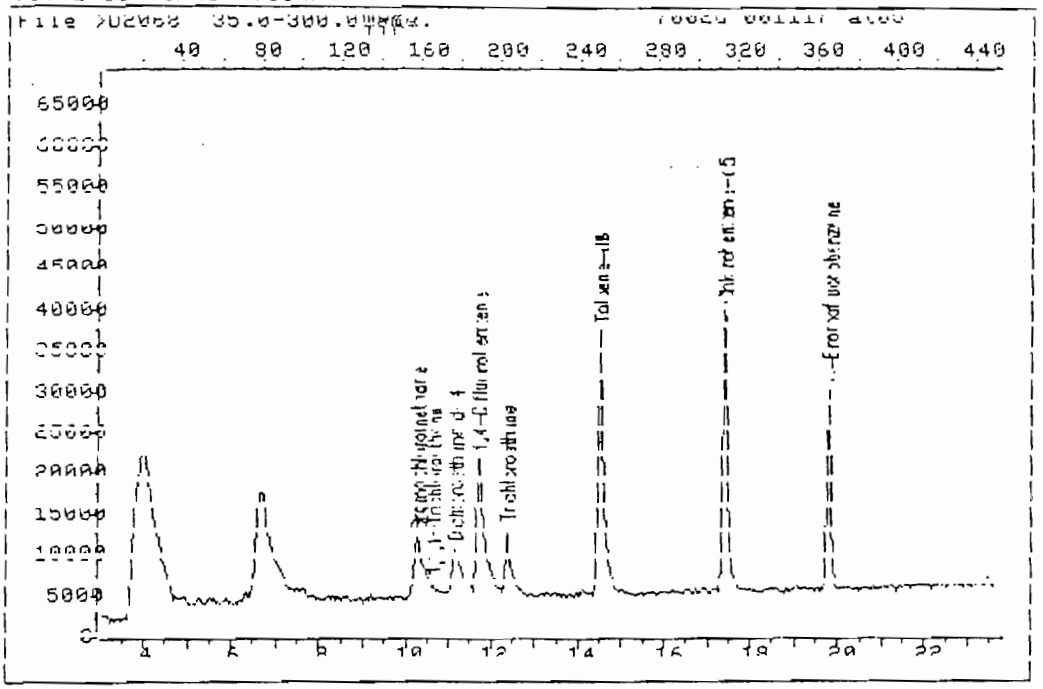
MW-5

› Name: AES, Inc. Contract:
› Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
:rix: (soil/water) WATER Lab Sample ID: MW-5
ıple wt/vol: 5.000 (g/mL) ML Lab File ID: D2068
'el: (low/med) LOW Date Received: 11/17/00
loisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
.l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

ımber TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	76-13-1	Ethane,1,1,2-Trichloro,1,2,2	6.61	120	JN
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					

TOTAL ION CHROMATOGRAM



Data File: >D2068::D4 Quant Output File: ^D2068::D3
Name: mw-5 Instrument ID: 7002 D
Misc: 7002d 001117 at05

Id File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1120 12:22

Operator ID: MANAGER
Quant Time : 001120 16:41
Injected at: **1120 16:17

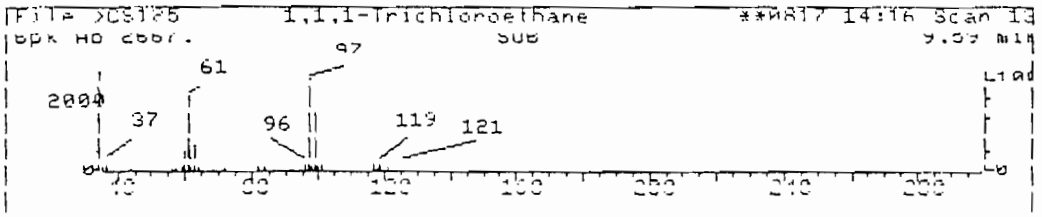
Operator ID: MANAI-ER Quant Rev: 7 Quant Time: 001120 16:41
Output File: ^D2068::D3 Injected at: **1120 16:17
Data File: >D2068::D4 Dilution Factor: 1.00000
Name: mw-5 Instrument ID: 7002 D
Misc: 7002d 001117 at05

ID File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1120 12:22

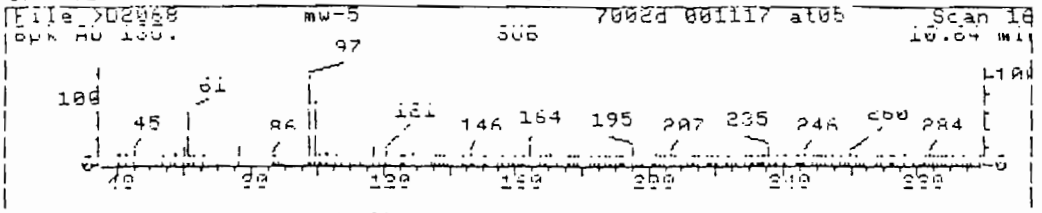
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.27	128.0	9980	50.00	UG	97
19)	1,2-Dichloroethane-d4	11.14	65.0	34388	48.97	UG	100
22)	*1,4-Difluorobenzene	11.69	114.0	61007	50.00	UG	94
23)	1,1,1-Trichloroethane	10.64	97.0	1770	2.42	UG	80
29)	Trichloroethene	12.38	130.0	11503	28.86	UG	91
36)	*Chlorobenzene-d5	17.38	117.0	58417	50.00	UG	93
42)	Toluene d-8	14.49	98.0	82256	49.96	UG	95
48)	Bromofluorobenzene	19.81	95.0	27842	51.34	UG	36

* Compound is ISTD

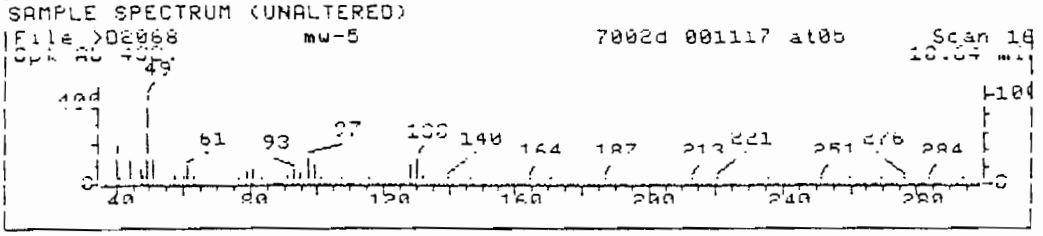
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



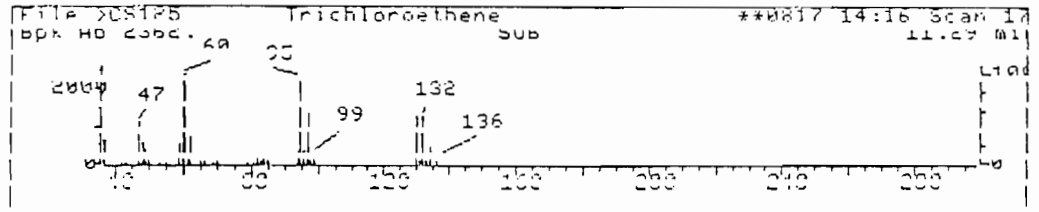
SAMPLE SPECTRUM (UNALTERED)



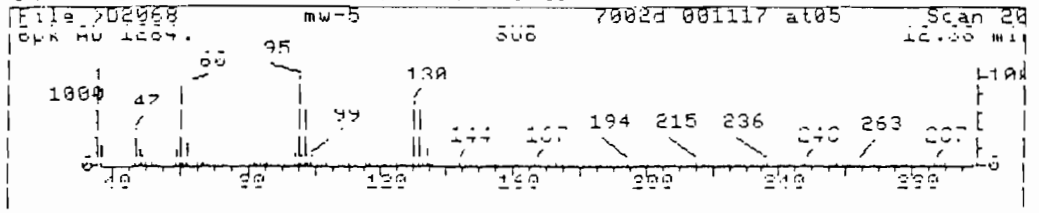
Data File: >D2068::D4 Quant Output File: ^D2068::D3
Name: mw-5 Instrument ID: 7002 D
Misc: 7002d 001117 at05
Quant Time: 001120 16:41 Quant ID File: IDSS91::MT
Injected at: **1120 16:17 Last Calibration: 000616 12:38
Last Qcal Time: **1120 12:22

Compound No : 23
Compound Name : 1,1,1-Trichloroethane
Scan Number : 167
Retention Time: 10.64 min.
Quant Ion : 97.0
Area : 1770
Concentration : 2.42 UG
q-value : 80

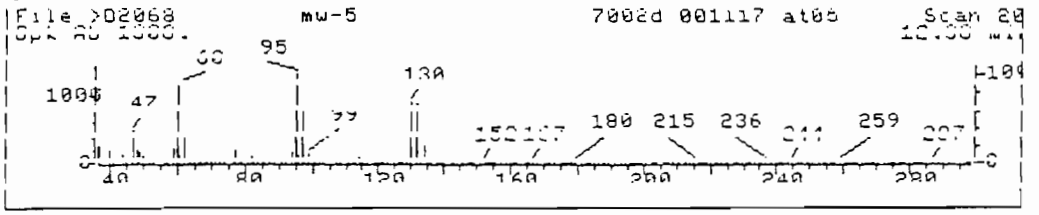
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >D2068::D4
Name: mw-5
Misc: 7002d 001117 at05
Quant Time: 001120 16:41
Injected at: **1120 16:17
Last Qcal Time: **1120 12:22

Quant Output File: ^D2068::D3
Instrument ID: 7002 D
Quant ID File: IDSS91::MT
Last Calibration: 000616 12:38

Compound No : 29
Compound Name : Trichloroethene
Scan Number : 205
Retention Time: 12.38 min.
Quant Ion : 130.0
Area : 11303
Concentration : 28.86 UG
q-value : 91

MS data file header from : >D2068::D4

Sample: mw-5 Operator: MANAGER SUPERVRP. 11/29/00 16:17
Misc : 7002d 001117 at05
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7002 D
Method file: METH04 Tuning file: MT9110D No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	220.	250.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	10.0	.2	0.0

>D2068 mw-5 7002d 001117 at05
35.01 300.0 CLP TIC
Upslope: .2000 Area Reject: 13630. Max Peaks: 2 Bunch: -1 Valley >100 %
Onslope: 0.0000 Results File ID2168 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	3.95	10	21	40	21852	894248	748991	100.00	69.379
2	6.61	74	79	97	12845	635040	330567	44.13	30.621

(120)

113

Sum of corrected areas: 1079558.

Summary of Unknowns PBM Library Search and Quantitation

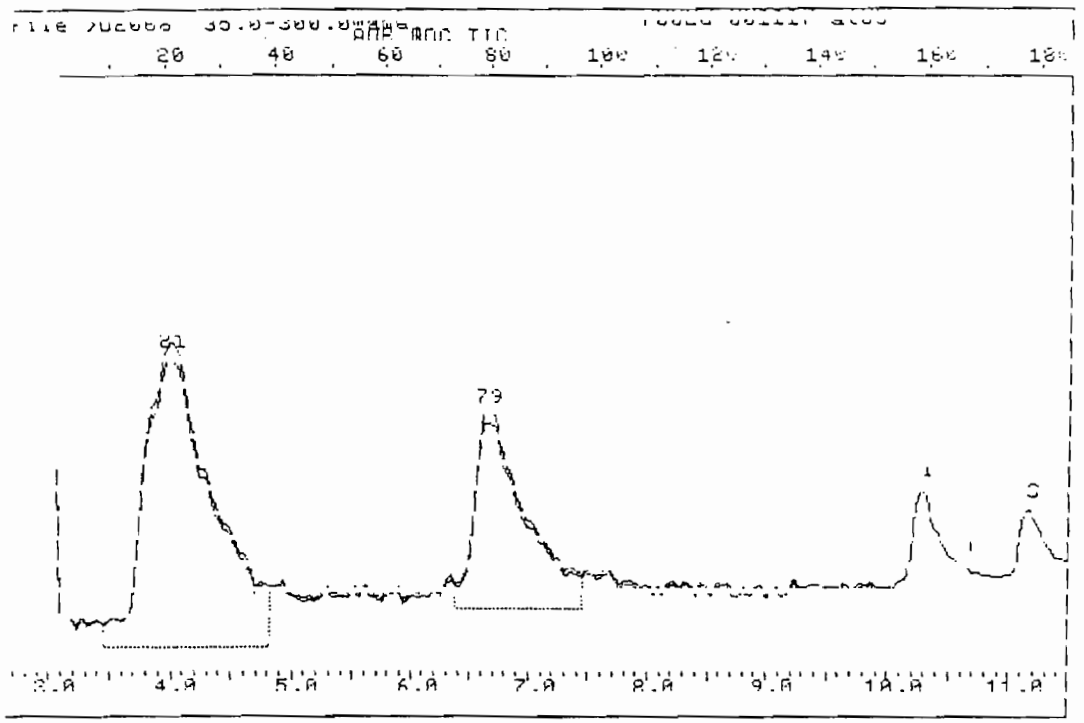
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	136304.	10.27	3.04 - 10.98
2	50.0	223809.	11.69	10.98 - 14.54
3	50.0	275263.	17.38	14.54 - 23.79

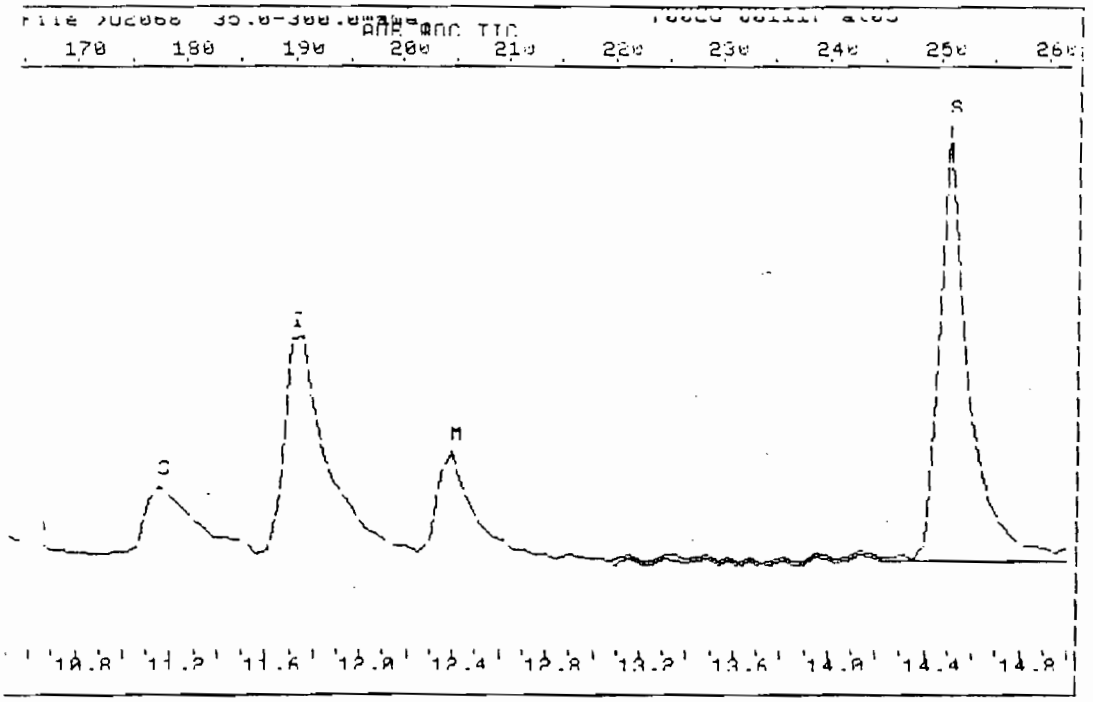
Dilution Factor = 1.00 This sample was 1000.00 g or mL

Correction Factor = 1.00

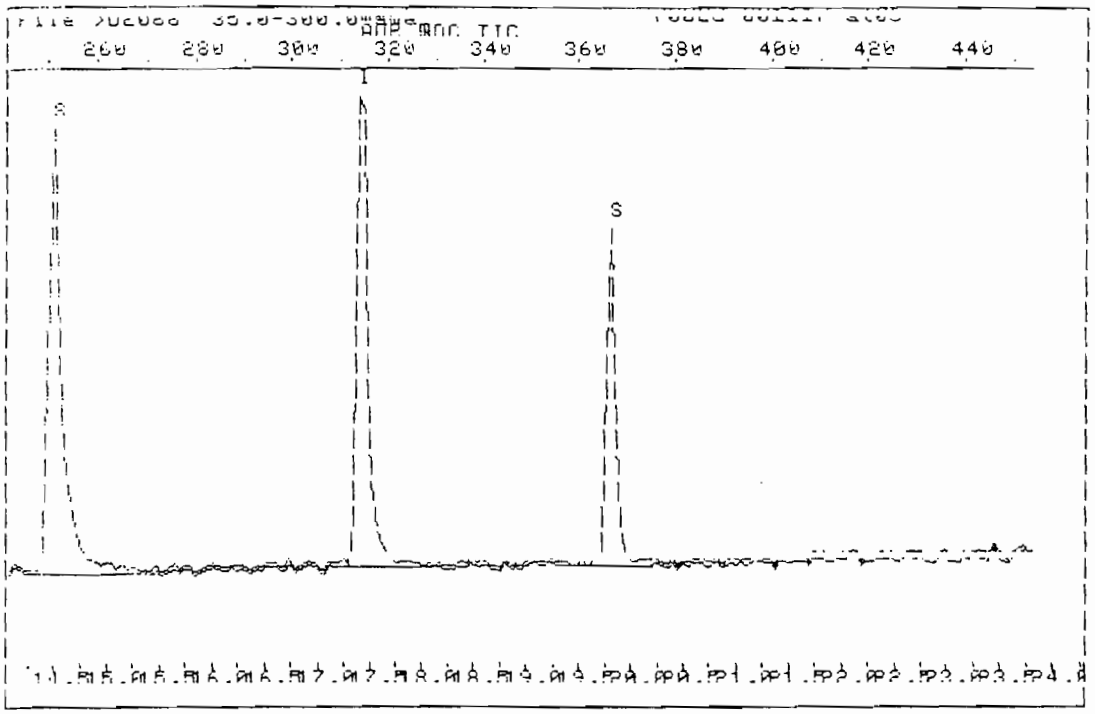
$$\text{Unknown Concentration} = \frac{|\text{Conc Int Std} * \text{Area Unknown}|}{|\text{Area Int Std}|} * \text{Correction Factor}$$

12:18 PM WED., 29 NOV., 2000

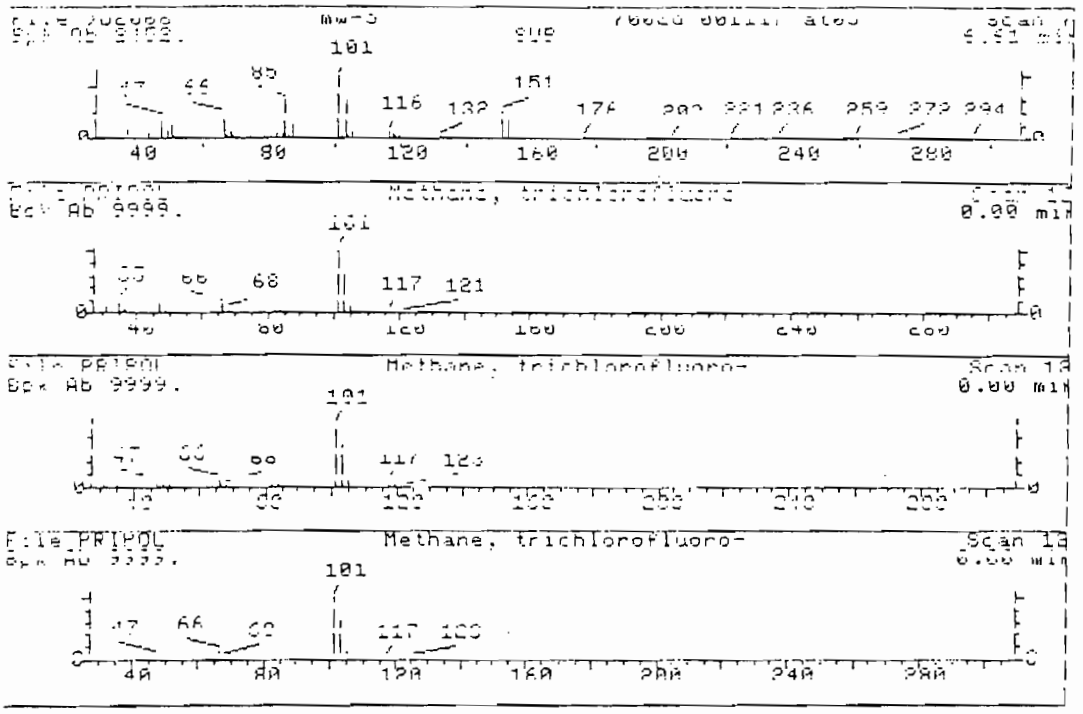




Instrument ID: 7002 Analyzed on: 11/20/00 16:17



Instrument ID: 7002 Analyzed on: 11/20/00 16:17



Instrument ID: 7002 Analyzed on: 11/20/00 16:17
Result 2 in PBM results file: LD2N68
Retention Time: 6.61 Area: 330567 Tentative Conc: 120.00
The unknown area is 242.52% of the nearest internal standard

1. Methane, trichlorofluoro- 136 CCl3F
2. Methane, trichlorofluoro- 136 CCl3F
3. Methane, trichlorofluoro- 136 CCl3F
4. Methane, trichlorofluoro- 136 CCl3F
5. Methane, trichlorofluoro- 136 CCl3F

Freon 113

Sample file: >D2N68 Spectrum #: 79
Search speed: 1 Tilting option: N No. of ion ranges searched: 41

	Prob.	CAS #	COM #	ROOT	K	DK	#FLG	TILT	%	MON	C	I	R	U
1.	20	127	163	PRIPOL	35	66	0	0	100	53	5	15		
2.	18	126	162	PRIPOL	40	53	0	0	90	56	4	22		
3.	18	125	161	PRIPOL	39	54	0	0	94	56	4	21		
4.	18	128	164	PRIPOL	49	47	0	0	92	56	4	28		
5.	18	75694	10283	NBS49K	49	47	0	0	92	56	4	28		

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-6

Name: AES, Inc. Contract:

Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1

rix: (soil/water) WATER Lab Sample ID: MW-6

ple wt/vol: 5.000 (g/mL) ML Lab File ID: D2069

el: (low/med) LOW Date Received: 11/17/00

loisture: not dec._____ Date Analyzed: 11/20/00

Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	3.	J
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	7.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

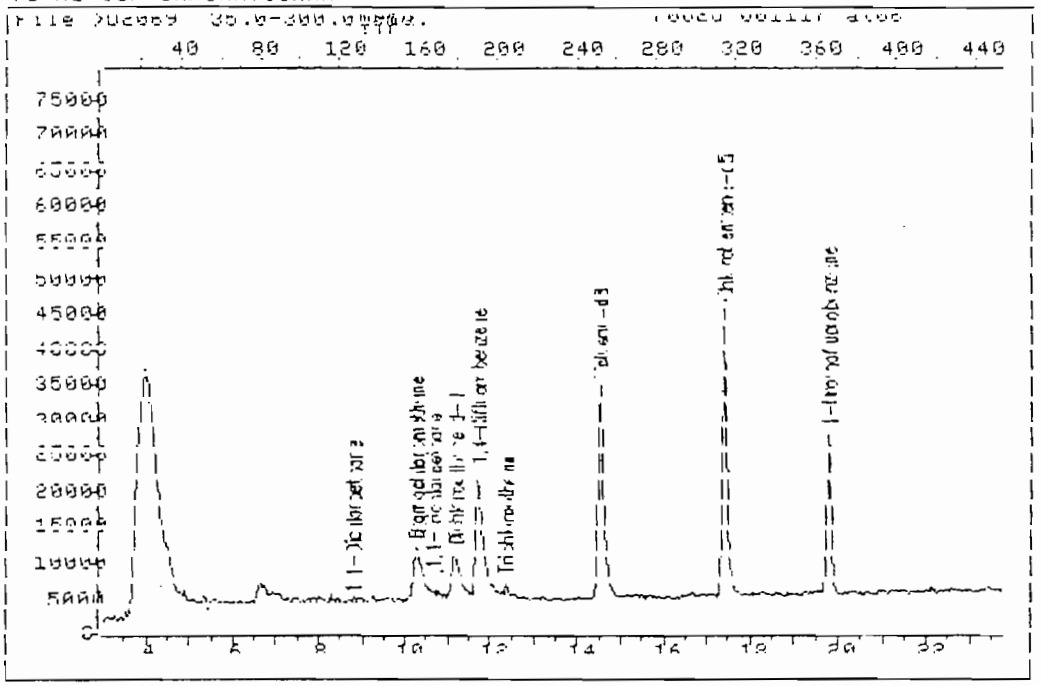
MW-6

~ Name: AES, Inc. Contract:
b Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
trix: (soil/water) WATER Lab Sample ID: MW-6
mple wt/vol: 5.000 (g/mL) ML Lab File ID: D2069
vel: (low/med) LOW Date Received: 11/17/00
Moisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

umber TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	76-13-1	Ethane,1,1,2-Trichloro,1,2,2	6.62	19	JN
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					
.1.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

TOTAL ION CHROMATOGRAM



Data File: >D2069::D4 Quant Output File: ^D2069::D3
Name: mw-6 Instrument ID: 7002 D
Misc: 7002d 001117 at06

Id File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1120 12:22

Operator ID: MANAGER
Quant Time : 001120 17:11
Injected at: **1120 16:46

QUANT REPORT Page 1

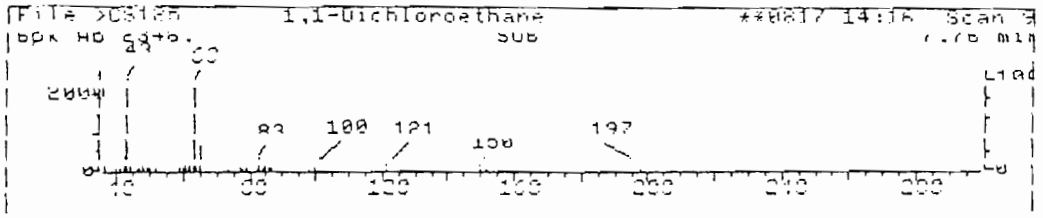
Operator ID: MANAGER Quant Rev: 7 Quant Time: 001120 17:11
Output File: ^D2069::D3 Injected at: **1120 16:46
Data File: >D2069::D4 Dilution Factor: 1.00000
Name: mw-6 Instrument ID: 7002 D
Misc: 7002d 001117 at06

ID File: ID5591::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1120 12:22

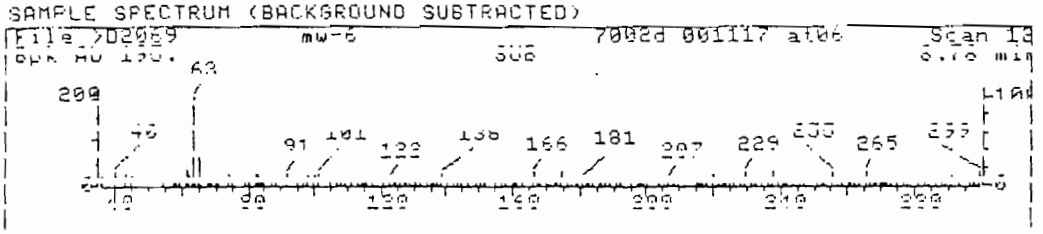
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.24	128.0	10346	50.00	UG	95
15)	1,1-Dichloroethane	8.78	63.0	5342	5.13	UG	99
19)	1,2-Dichloroethane-d4	11.16	65.0	34098	46.84	UG	100
22)	*1,4-Difluorobenzene	11.71	114.0	61340	50.00	UG	95
23)	1,1,1-Trichloroethane	10.65	97.0	2039	2.91	UG	88
29)	Trichloroethene	12.35	130.0	2565	6.51	UG	95
36)	*Chlorobenzene-d5	17.39	117.0	56479	50.00	UG	92
42)	Toluene d-8	14.50	98.0	81893	51.45	UG	92
48)	Bromofluorobenzene	19.78	95.0	27456	52.37	UG	91

* Compound is ISTD

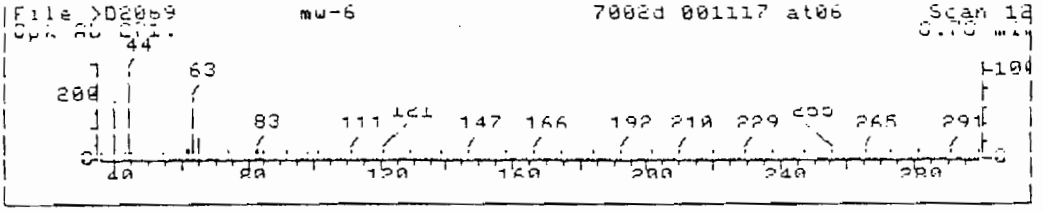
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



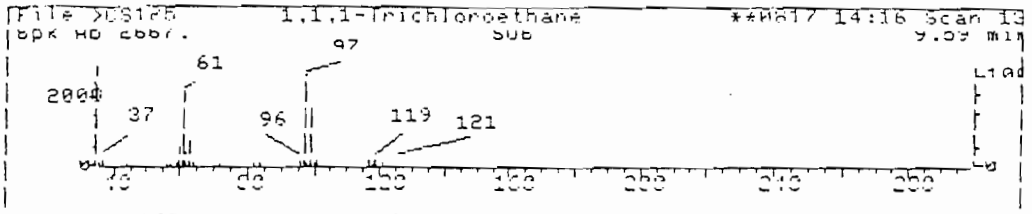
SAMPLE SPECTRUM (UNALTERED)



Data File: >D2069::D4 Quant Output File: ^D2069::D3
Name: mw-6 Instrument ID: 7002 D
Misc: 7002d 001117 at06
Quant Time: 001120 17:11 Quant ID File: IDSS91::MT
Injected at: **1120 16:46 Last Calibration: 000616 12:38
Last Qcal Time: **1120 12:22

Compound No : 15
Compound Name : 1,1-Dichloroethane
Scan Number : 127
Retention Time: 8.78 min.
Quant Ion : 63.0
Area : 534?
Concentration : 5.13 UG
q-value : 99

REFERENCE STANDARD SPECTRUM



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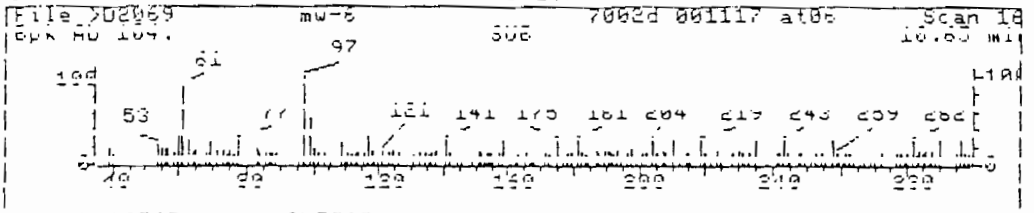
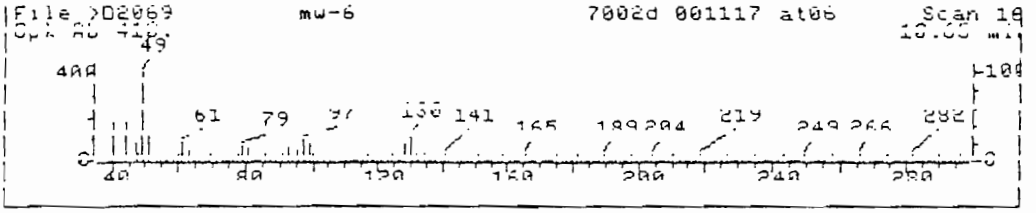


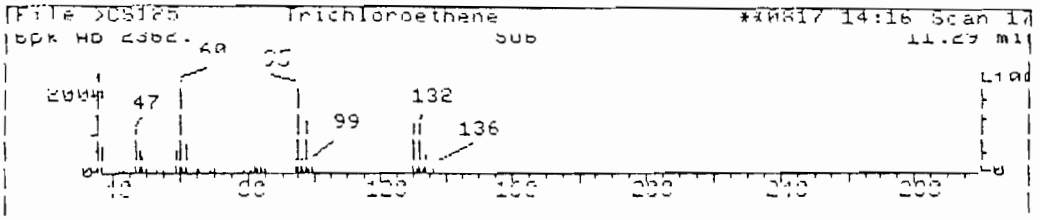
SAMPLE SPECTRUM (UNALTERED)



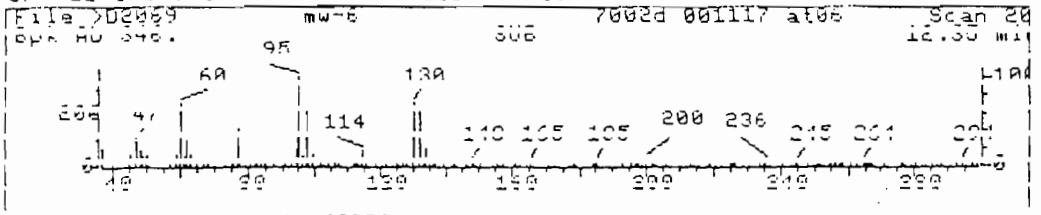
Data File: >D2069::D4 Quant Output File: ^D2069::D3
Name: mw-6 Instrument ID: 7002 D
Misc: 7002d 001117 at06
Quant Time: 001120 17:11 Quant ID File: IDSS91::MT
Injected at: **1120 16:46 Last Calibration: 000616 12:38
Last Qcal Time: **1120 12:22

Compound No : 23
Compound Name : 1,1,1-Trichloroethane
Scan Number : 168
Retention Time: 10.65 min.
Quant Ion : 97.0
Area : 2139
Concentration : 2.91 UG
q-value : 88

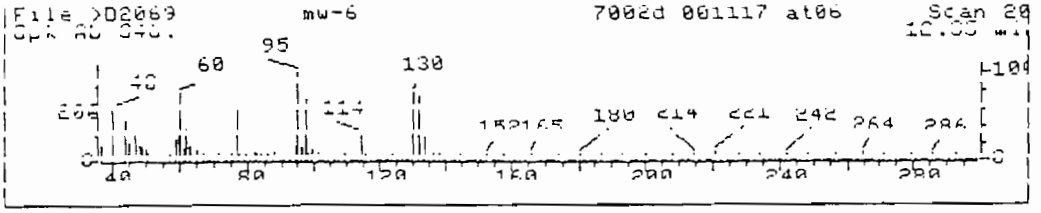
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >D2069::D4
Name: mw-6
Misc: 7002d 001117 at06
Quant Time: 001120 17:11
Injected at: **1120 16:46
Last Qcal Time: **1120 12:22

Quant Output File: ^D2069::D3
Instrument ID: 7002 D

Quant ID File: IDSS91::MT
Last Calibration: 000616 12:38

Compound No : 29
Compound Name : Trichloroethene
Scan Number : 205
Retention Time: 12.35 min.
Quant Ion : 130.0
Area : 2565
Concentration : 6.51 UG
q-value : 95

MS data file header from : >02069::D4

Sample: mw-6 Operator: MANAGER SUPERVISOR 11/29/00 16:46
Misc : 7002d 001117 at06
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7002 D
Method file: MEIH04 Tuning file: MT9110D No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	250.	250.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	5.0	.1	0.0	.2	0.0

>02069 mw-6 7002d 001117 at06
35.01 300.0 CLP TIC
Upslope: .2000 Area Reject: 11273. Max Peaks: 2 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File ID2069 Sorted by Time/Area _INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	3.97	11	22	44	35249	1430213	1252143	100.00	96.687
2	6.62	77	80	85	3036	143917	42905	3.43	3.313

Sum of corrected areas: 1295048.

Summary of Unknowns PBM Library Search and Quantitation

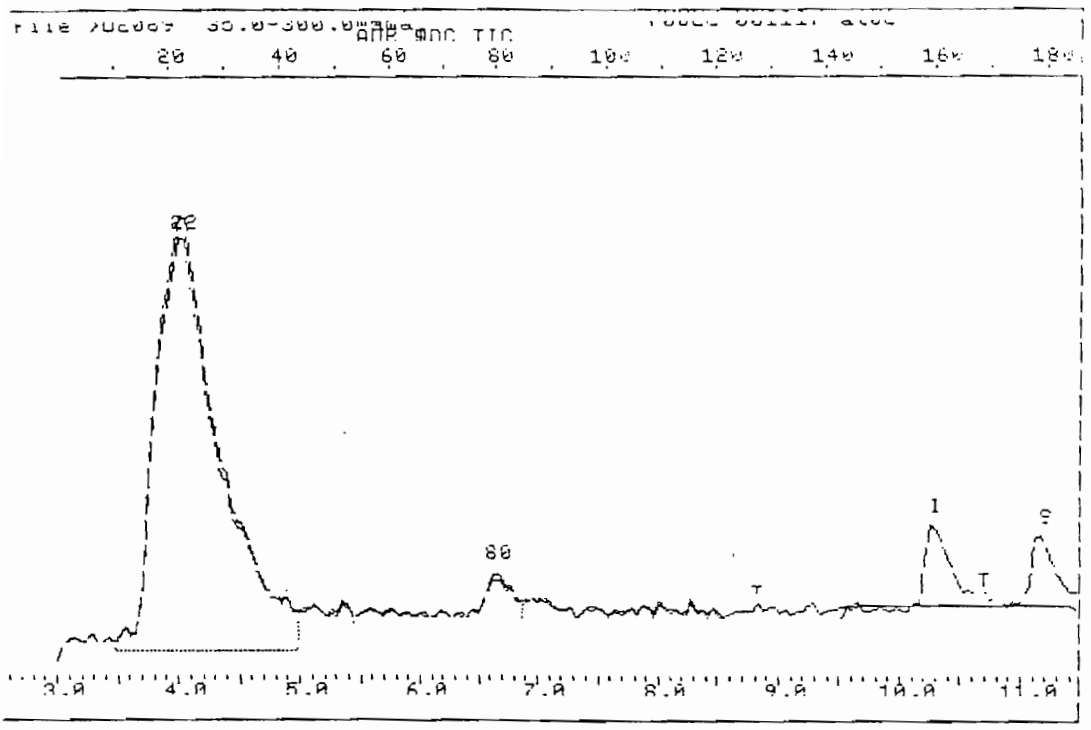
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	112730.	10.24	3.01 - 10.98
2	50.0	189913.	11.71	10.98 - 14.55
3	50.0	268505.	17.39	14.55 - 23.76

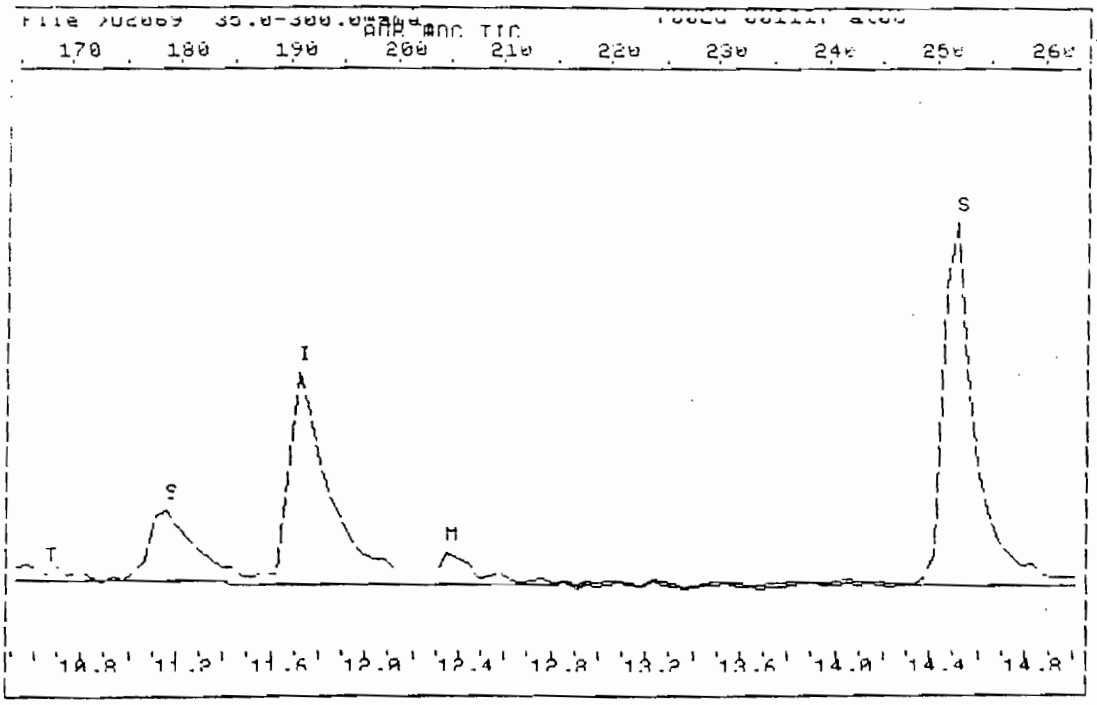
Dilution Factor = 1.00 This sample was 1000.00 g or mL

Correction Factor = 1.00

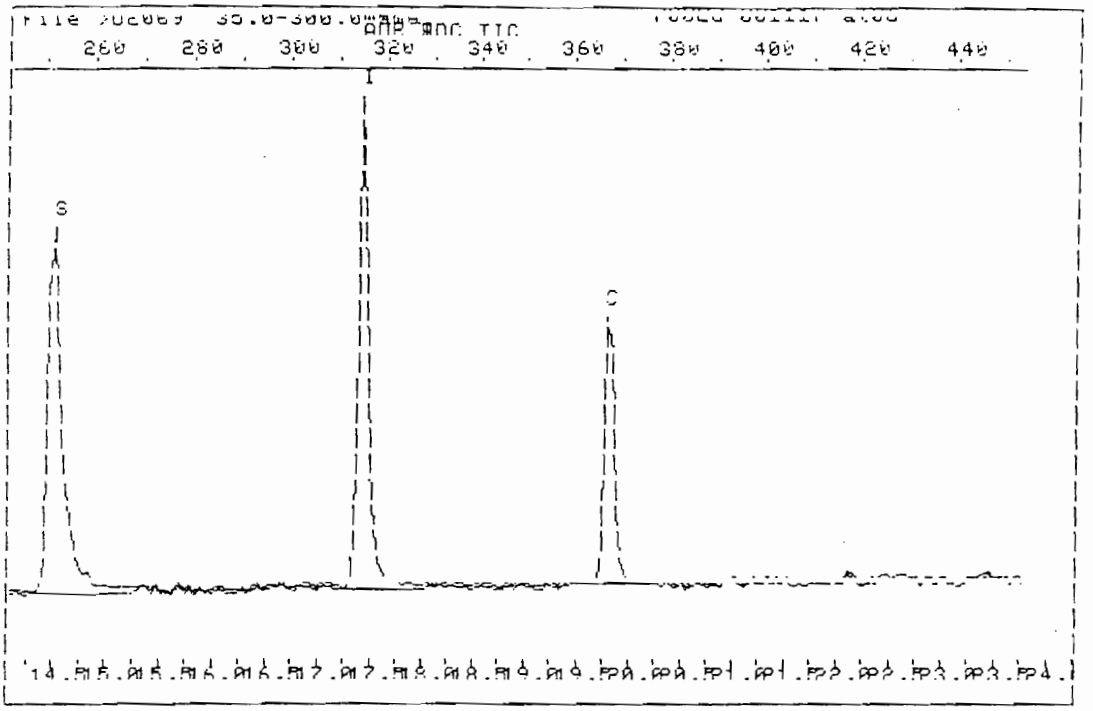
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

12:30 PM WED., 29 NOV., 2000

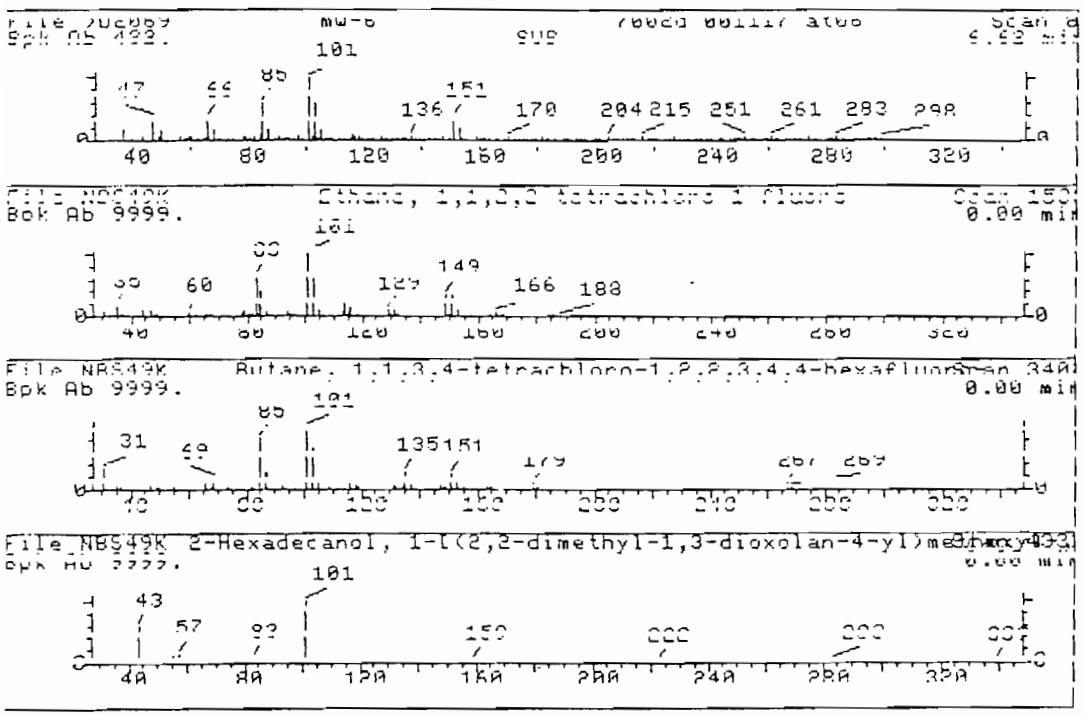




Instrument ID: 7002 Analyzed on: 11/20/00 16:46



Instrument ID: 7002 Analyzed on: 11/20/00 16:46



Frear 113

Instrument ID: 7002 Analyzed on: 11/20/00 16:46
Result 2 in PBM results file: LD2069
Retention Time: 6.62 Area: 42905 Tentative Conc: 19.00
The unknown area is 38.06% of the nearest internal standard

1.	Ethane, 1,1,2,2-tetrachloro-1-fluoro-	184 C2HCl4F
2.	Butane, 1,1,3,4-tetrachloro-1,2,2,3,4,4-hexafluoro-	302 C4Cl4F6
3.	2-Hexadecanol, 1-[(2,2-dimethyl-1,3-dioxolan-4-yl)methoxyl-, acetate	414 C24H46O5
4.	Cyclobutanone, 2,2-dipropyl-	154 C10H18O
5.	Butanoic acid, 4-phenoxy-, methyl ester	194 C11H14O3
6.	Butanedioic acid, dipropyl ester	202 C10H18O4

Sample file: >D2069 Spectrum #: 80
Search speed: 1 Tilting option: N No. of ion ranges searched: 31

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	IV
1.	27*	354143	10364	NBS49K	27	112	3	0	96	39	10			13
2.	20	423981	10498	NBS49K	68	89	2	0	68	53	5			15
3.	18	56599805	10546	NBS49K	65	71	1	0	69	60	4			
4.	15*	61406277	10318	NBS49K	30	82	3	0	100	60	3			
5.	15*	21273278	10393	NBS49K	31	84	3	0	100	60	3			13
6.	11	925155	10405	NBS49K	44	52	1	0	74	62	2			14

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-7

Name: AES, Inc. Contract:

Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1

Matrix: (soil/water) WATER Lab Sample ID: MW-7

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: D2070

Level: (low/med) LOW Date Received: 11/17/00

Moisture: not dec._____ Date Analyzed: 11/20/00

GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	4.	J
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	22.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

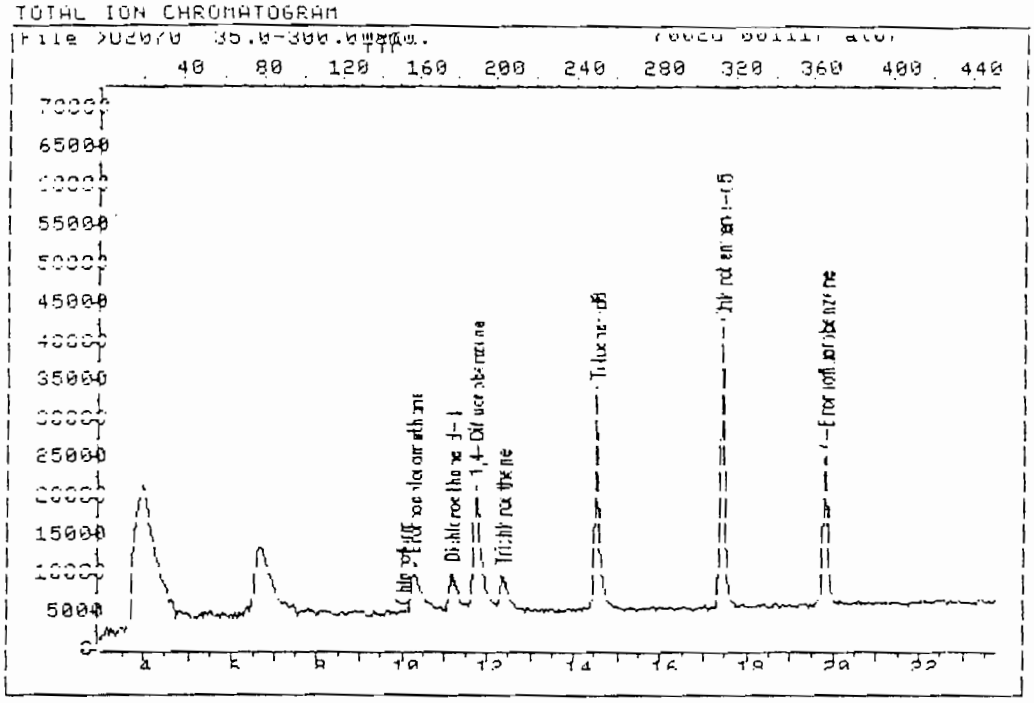
MW-7

Name: AES, Inc. Contract:
Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
rix: (soil/water) WATER Lab Sample ID: MW-7
ple wt/vol: 5.000 (g/mL) ML Lab File ID: D2070
el: (low/med) LOW Date Received: 11/17/00
oisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

mber TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	76-13-1	Ethane,1,1,2-Trichloro,1,2,2	6.61	120	JN
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					

TOTAL ION CHROMATOGRAM



Data File: >D2070::D4 Quant Output File: ^D2070::D3
Name: mw-7 Instrument ID: 7002 D
Misc: 7002d 001117 at07

Id File: IOSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1120 12:22

Operator ID: MANAGER
Quant Time : 001120 17:40
Injected at: **1120 17:16

QUANT REPORT

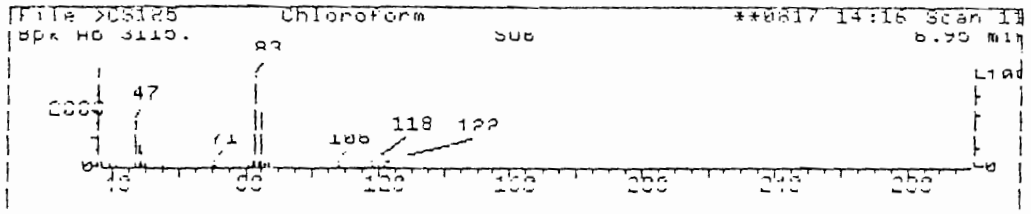
Operator ID: MANAGER Quant Rev: 7 Quant Time: 001120 17:40
Output File: ^D2070::D3 Injected at: **1120 17:16
Data File: >D2070::D4 Dilution Factor: 1.00000
Name: mw-7 Instrument ID: 7002 D
Misc: 7002d 001117 at07

ID File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1120 12:22

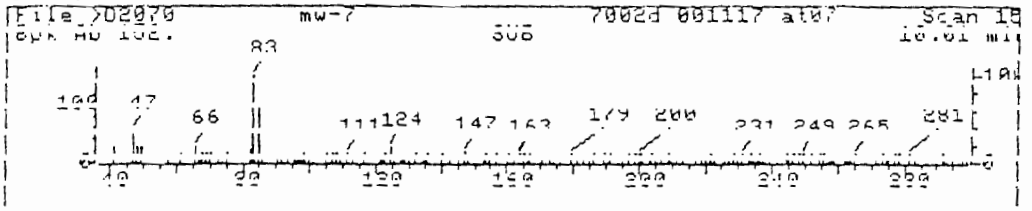
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.24	128.0	9201	50.00	UG	89
18)	Chloroform	10.01	83.0	3198	3.66	UG	93
19)	1,2-Dichloroethane-d4	11.15	65.0	31935	49.33	UG	100
22)	*1,4-Difluorobenzene	11.70	114.0	57573	50.00	UG	95
29)	Trichloroethene	12.34	130.0	7954	21.52	UG	96
36)	*Chlorobenzene-d5	17.39	117.0	53726	50.00	UG	93
42)	Toluene d-8	14.50	98.0	77150	50.95	UG	94
48)	Bromofluorobenzene	19.77	95.0	27206	54.55	UG	53

* Compound is ISTD

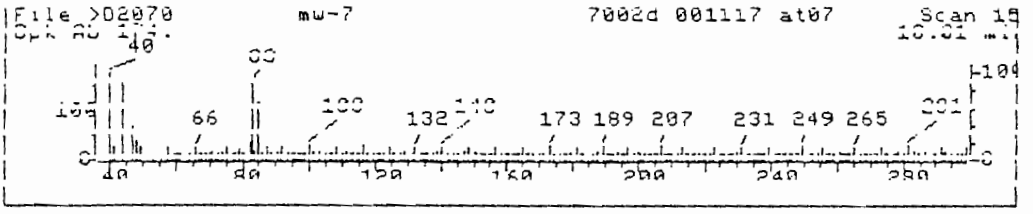
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

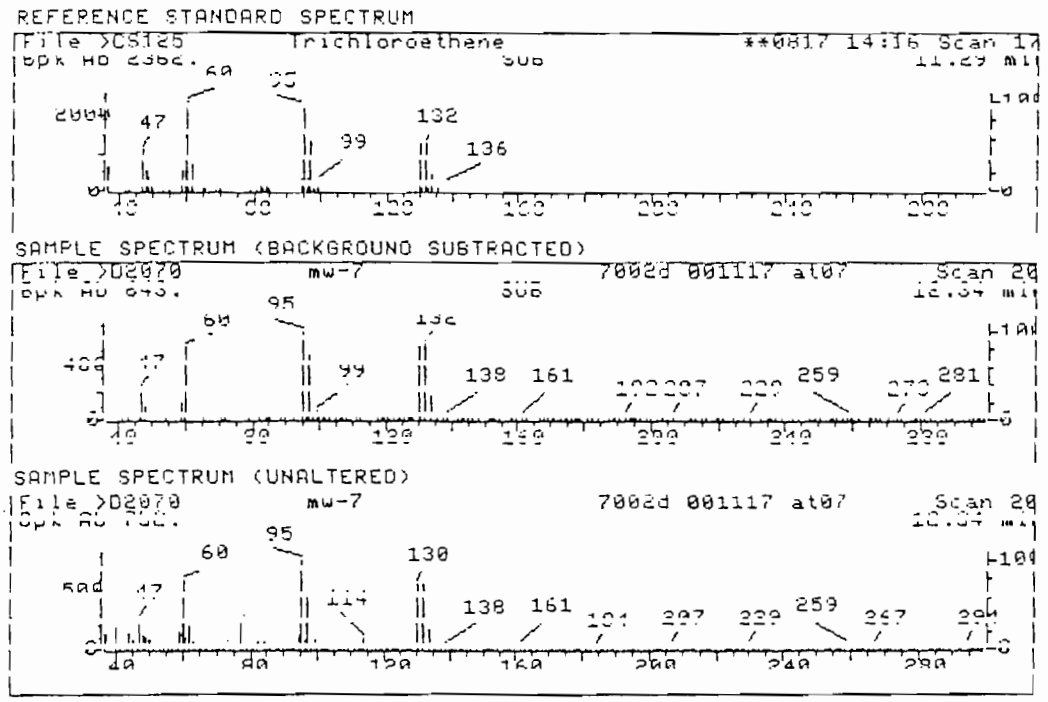


Data File: >D2070::D4
Name: mw-7
Misc: 7002d 001117 at07
Quant Time: 001120 17:40
Injected at: **1120 17:16
Last Qcal Time: **1120 12:22

Quant Output File: ^D2070::D3
Instrument ID: 7002 D

Quant ID File: IDSS91::MT
Last Calibration: 000616 12:38

Compound No : 18
Compound Name : Chloroform
Scan Number : 153
Retention Time: 10.01 min.
Quant Ion : 83.0
Area : 3198
Concentration : 3.66 UG
q-value : 93



Data File: >D2070::D4
Name: mw-7
Misc: 7002d 001117 at07
Quant Time: 001120 17:40
Injected at: **1120 17:16
Last Qcal Time: **1120 12:22

Quant Output File: ^D2070::D3
Instrument ID: 7002 D
Quant ID File: IDSS91::MT
Last Calibration: 000616 12:38

Compound No : 29
Compound Name : Trichloroethene
Scan Number : 204
Retention Time: 12.34 min.
Quant Ion : 130.0
Area : 7934
Concentration : 21.52 UG
q-value : 96

MS data file header from : >D2070::D4

Sample: mw-7 Operator: MANAGER SUPER GRP. 11/20/00 17:16
Misc : 7002d 001117 at07
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7002 D
Method file: METH04 Tuning file: MT900D No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	230.	230.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0

>D2070 mw-7 7002d 001117 at07
35.01 300.0 CLP TIC
Upslope: .2000 Area Reject: 10619. Max Peaks: 3 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File ID2070 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	3.45	8	10	12	1402	28150	10968	1.60	1.156
2	3.96	12	21	39	19411	839278	685371*	100.00	72.223
3	6.61	72	79	99	9197	590134	252628	36.86	26.621

Sum of corrected areas: 948959.

Summary of Unknowns PBM Library Search and Quantitation

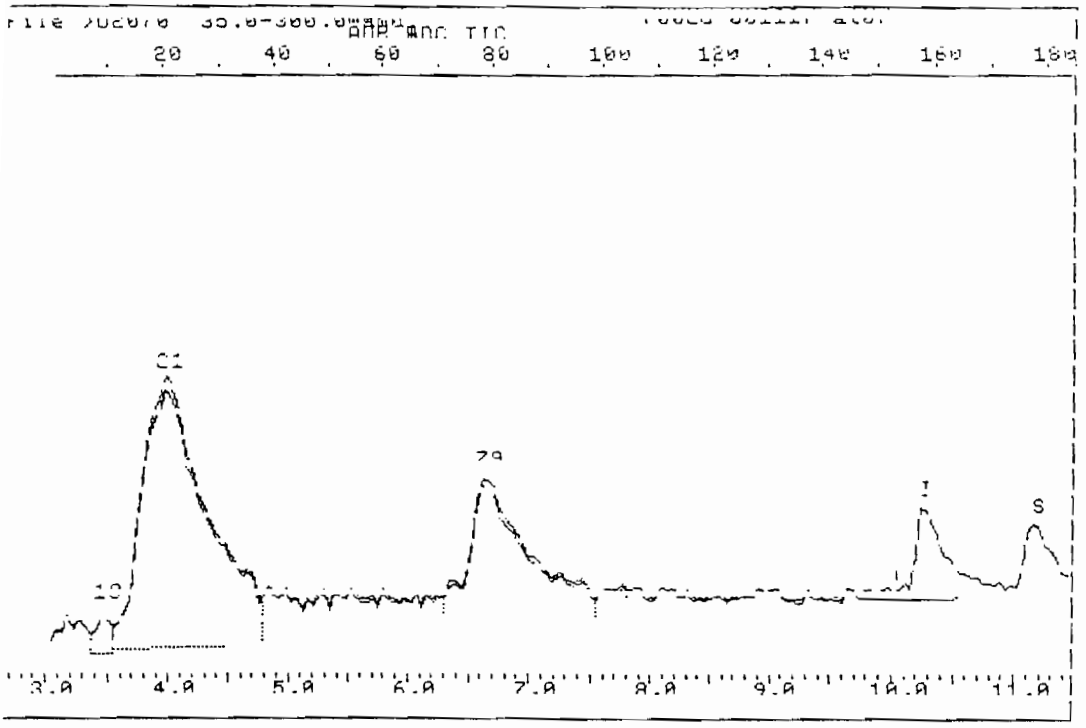
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	106194.	10.24	3.04 - 10.97
2	50.0	217251.	11.70	10.97 - 14.54
3	50.0	248502.	17.39	14.54 - 23.76

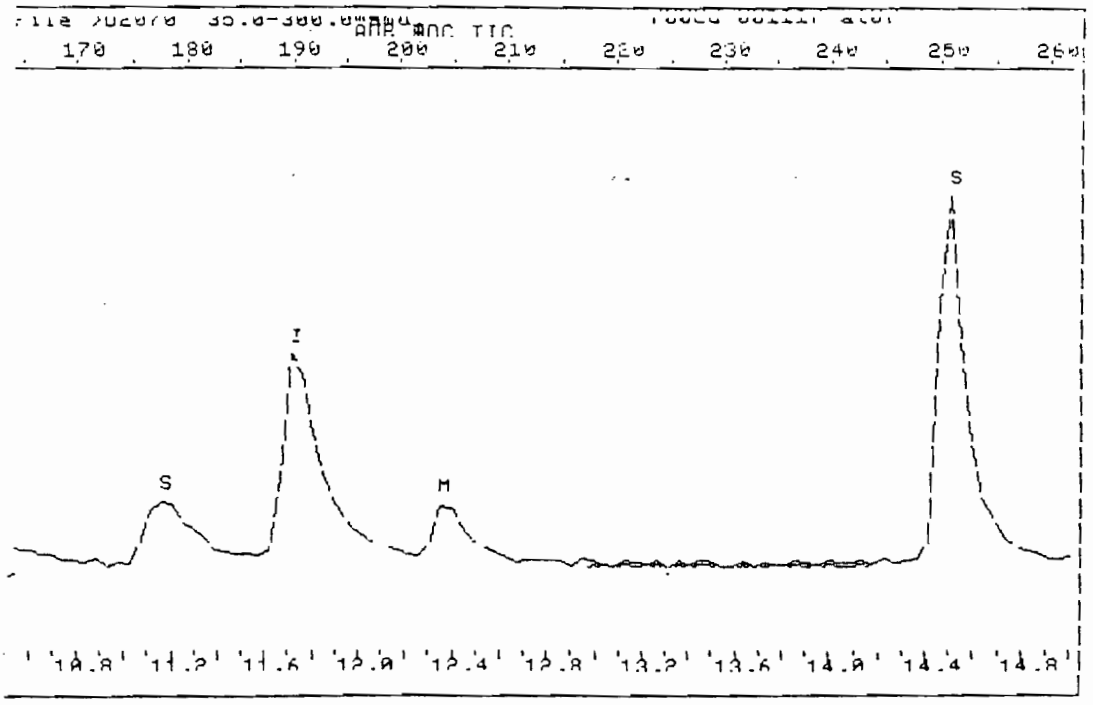
Dilution Factor = 1.00 This sample was 1000.00 g or mL

Correction Factor = 1.00

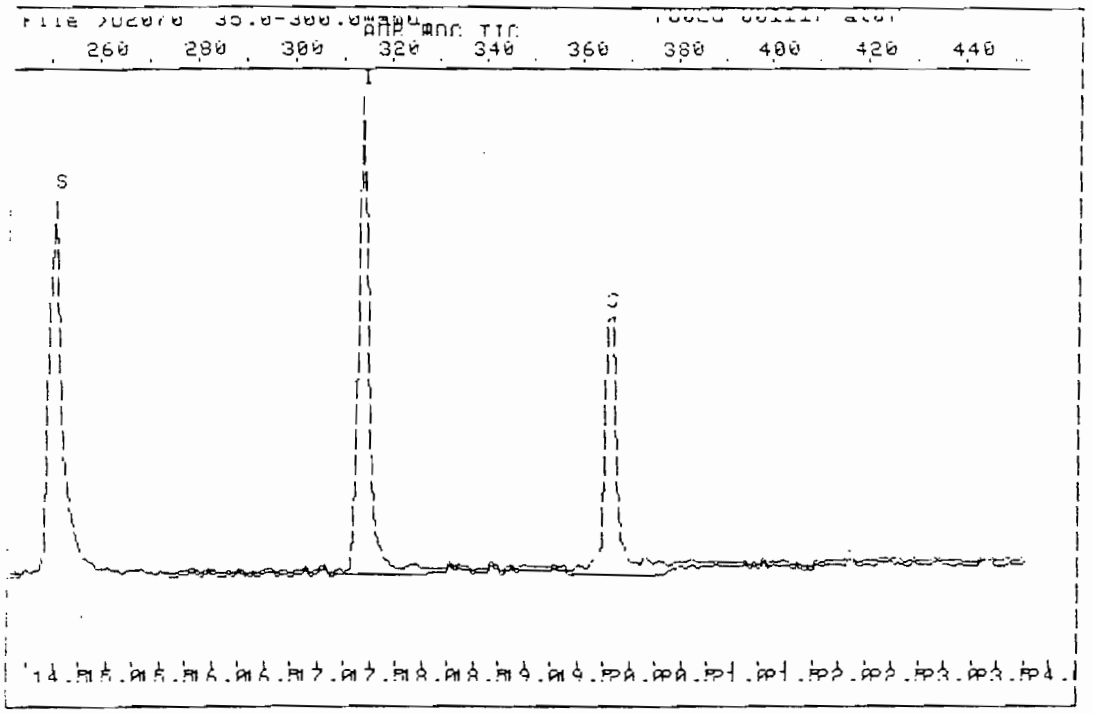
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

12:42 PM WED., 29 NOV., 2000

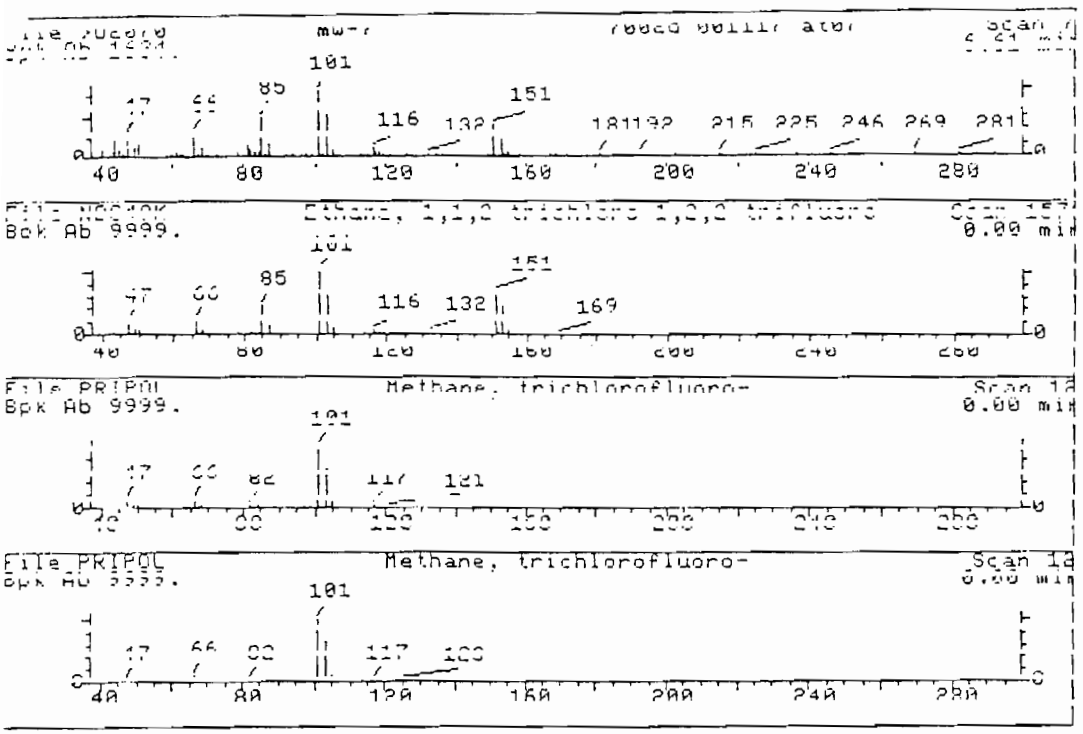




Instrument ID: 7002 Analyzed on: 11/20/00 17:16



Instrument ID: 7002 Analyzed on: 11/20/00 17:16



from 113
=120

1.	Ethane, 1,1,2-trichloro-1,2,2-trifluoro-	186	C2Cl3F3
2.	Methane, trichlorofluoro-	136	CCl3F
3.	Methane, trichlorofluoro-	136	CCl3F
4.	Methane, trichlorofluoro-	136	CCl3F
5.	Methane, trichlorofluoro-	136	CCl3F
6.	Methane, trichlorofluoro-	136	CCl3F
7.	Ethane, 1,1,2,2-tetrachloro-1,2-difluoro-	202	C2Cl4F2

Sample file: >D2070 Spectrum #: 79
Search speed: 1 Tilting option: F No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	IU
1.	78	76131	10367	NBS49K	107	31	3	3	100	3	55			19
2.	28	127	163	PRIPOL	66	35	2	4	100	43	8			16
3.	20	126	162	PRIPOL	35	58	0	0	95	53	5			17
4.	20	75694	10783	NBS49K	35	61	0	0	98	52	5			16
5.	20	128	164	PRIPOL	35	61	0	0	98	52	5			1
6.	20	125	161	PRIPOL	30	63	0	0	100	53	5			
7.	20*	76120	10400	NBS49K	28	103	3	0	100	54	5			15

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8

Name: AES, Inc. Contract:

Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1

Matrix: (soil/water) WATER Lab Sample ID: MW-8

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: D2071

Level: (low/med) LOW Date Received: 11/17/00

% Moisture: not dec._____ Date Analyzed: 11/20/00

GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	2.	J
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	7.	
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	91.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

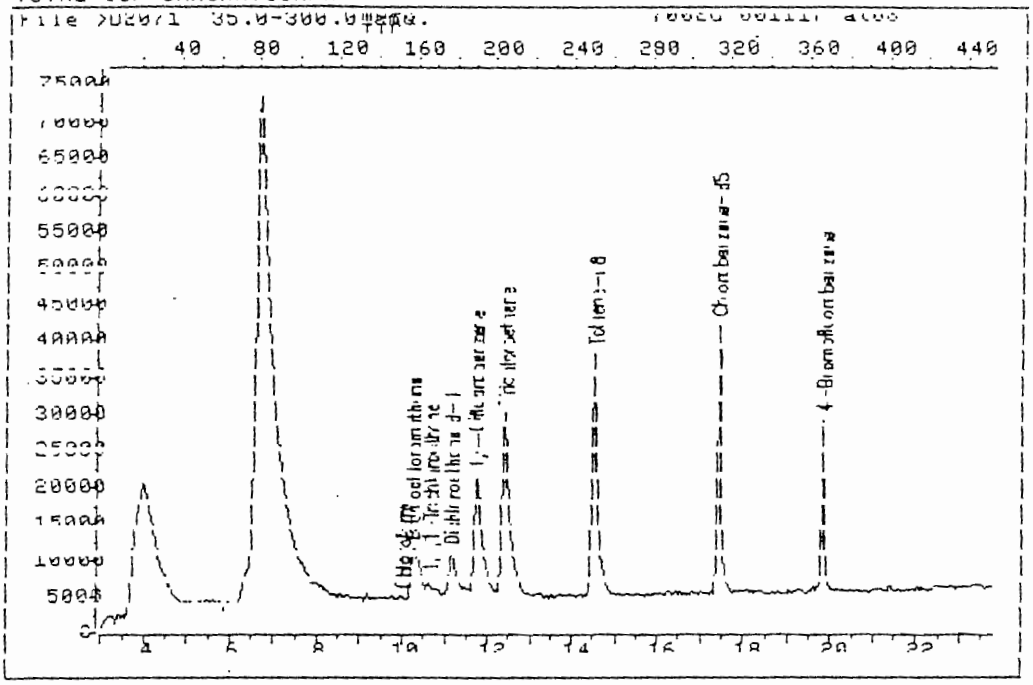
MW-8

) Name: AES, Inc. Contract:
) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
:rix: (soil/water) WATER Lab Sample ID: MW-8
ıple wt/vol: 5.000 (g/mL) ML Lab File ID: D2071
'el: (low/med) LOW Date Received: 11/17/00
loisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
.l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
ımber TICs found: 1 (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	76-13-1	Ethane,1,1,2-Trichloro,1,2,2	6.66	530	JN
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					
.1.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

TOTAL ION CHROMATOGRAM



Data File: >D2071::D4 Quant Output File: ^D2071::D3
Name: mw-8 Instrument ID: 7002 D
Misc: 7002d 001117 at08

Id File: IOSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1120 12:22

Operator ID: MANAGER
Quant Time : 001120 18:09
Injected at: **1120 17:45

QUANT REPORT Page 1

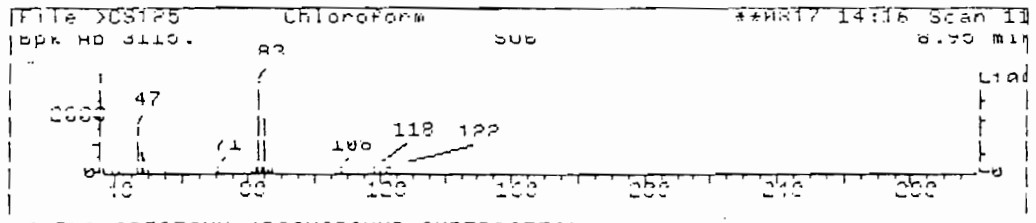
Operator ID: MANAGER Quant Rev: 7 Quant Time: 001120 18:09
Output File: ^D2071::D3 Injected at: **1120 17:45
Data File: >D2071::D4 Dilution Factor: 1.00000
Name: mw-8 Instrument ID: 7002 D
Misc: 7002d 001117 at08

ID File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1120 12:22

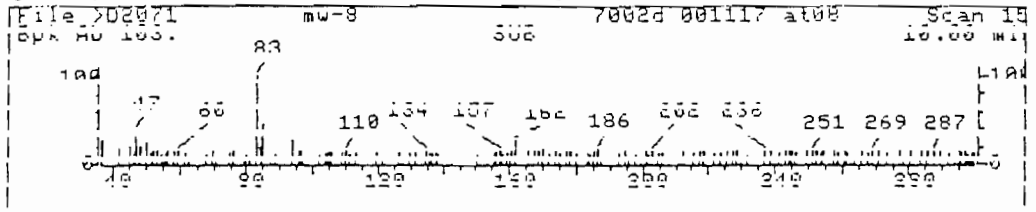
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.23	128.0	9535	50.00	UG	99
18)	Chloroform	10.00	83.0	2084	2.30	UG	82
19)	1,2-Dichloroethane-d4	11.15	65.0	35154	52.40	UG	100
22)	*1,4-Difluorobenzene	11.70	114.0	62069	50.00	UG	94
23)	1,1,1-Trichloroethane	10.65	97.0	5240	7.04	UG	86
29)	Trichloroethene	12.39	130.0	36249	90.97	UG	91
36)	*Chlorobenzene-d5	17.38	117.0	58906	50.00	UG	94
42)	Toluene d-8	14.50	98.0	84874	51.12	UG	97
48)	Bromofluorobenzene	19.81	95.0	29338	53.65	UG	1

* Compound is ISTD

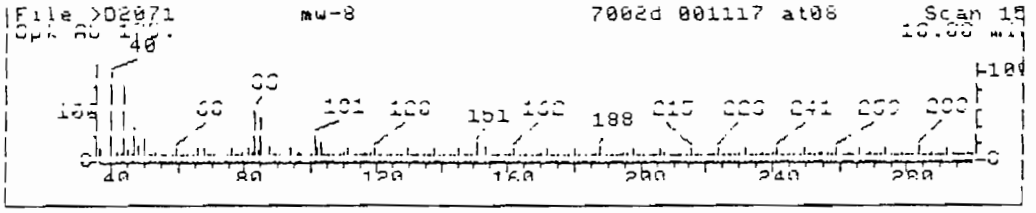
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



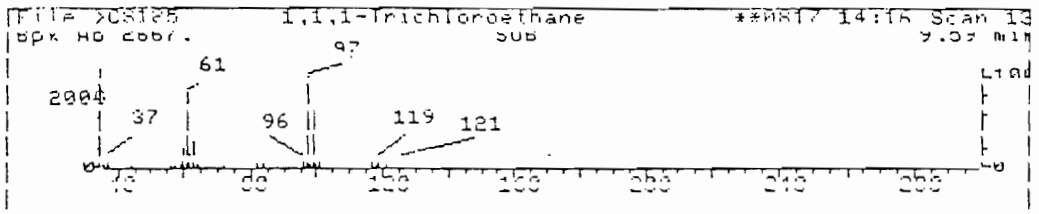
Data File: >D2071::D4
Name: mw-8
Misc: 7002d 001117 at08
Quant Time: 001120 18:09
Injected at: **1120 17:45
Last Qcal Time: **1120 12:22

Quant Output File: ^D2071::D3
Instrument ID: 7002 D

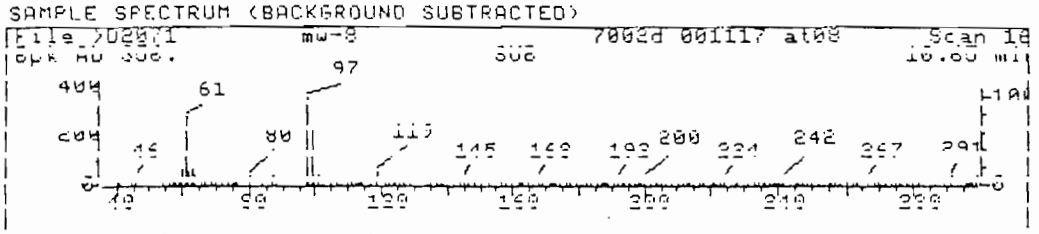
Quant ID File: IDSS91::MT
Last Calibration: 000616 12:38

Compound No : 18
Compound Name : Chloroform
Scan Number : 154
Retention Time: 10.00 min.
Quant Ion : 83.0
Area : 2084
Concentration : 2.30 UG
q-value : 82

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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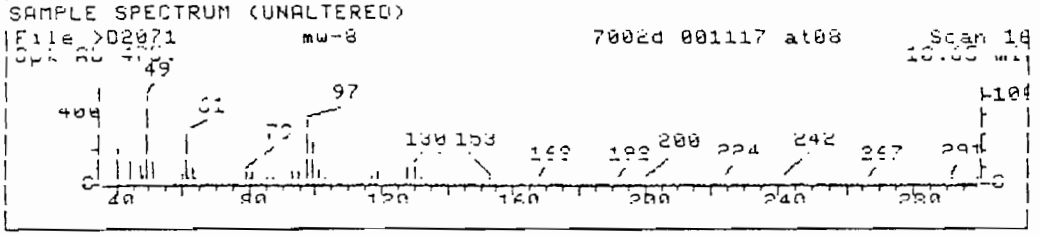
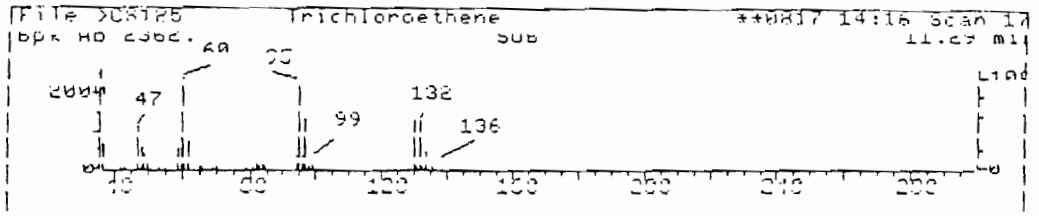


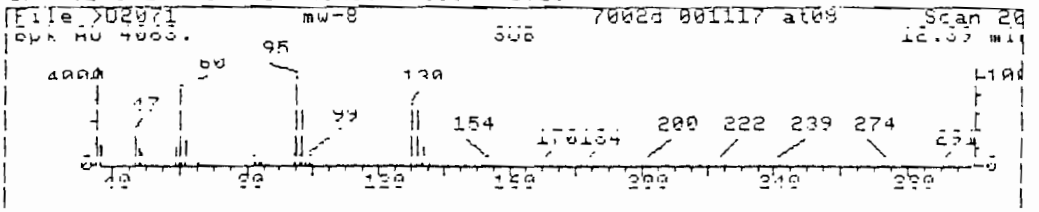
Data File: >D2071::D4 Quant Output File: ^D2071::D3
Name: mw-8 Instrument ID: 7002 D
Misc: 7002d 001117 at08
Quant Time: 001120 18:09 Quant ID File: IDSS91::MT
Injected at: **1120 17:45 Last Calibration: 000616 12:38
Last Qcal Time: **1120 12:22

Compound No : 23
Compound Name : 1,1,1-Trichloroethane
Scan Number : 168
Retention Time: 10.65 min.
Quant Ion : 97.0
Area : 5740
Concentration : 7.04 UG
q-value : 86

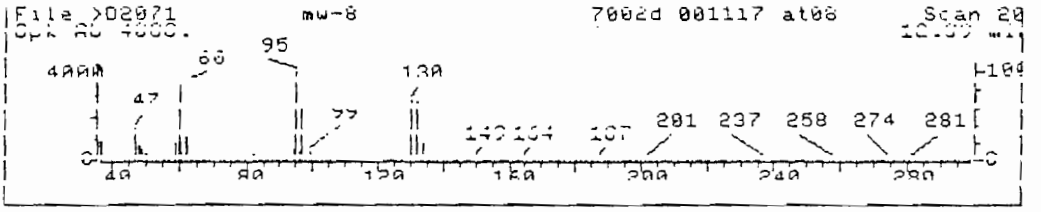
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >D2071::D4
Name: mw-8
Misc: 7002d 001117 at08
Quant Time: 001120 18:09
Injected at: **1120 17:45
Last Qcal Time: **1120 12:22

Quant Output File: ^D2071::D3
Instrument ID: 7002 D
Quant ID File: 1DSS91::MT
Last Calibration: 000616 12:38

Compound No : 29
Compound Name : Trichloroethene
Scan Number : 206
Retention Time: 12.39 min.
Quant Ion : 130.0
Area : 36249
Concentration : 90.97 UG
q-value : 91

MS data file header from : >D2071::D4

Sample: mw-8 Operator: MANAGER SUPER GRP. 11/20/00 17:45
Misc : 7002d 001117 at08
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7002 D
Method file: METH04 Tuning file: MT900D No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	230.	230.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0

>D2071 mw-8 7002d 001117 at08
35.01 300.0 CLP TIC
Upslope: .2000 Area Reject: 20764. Max Peaks: 2 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File ID2071 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	3.96	14	22	42	18517	823072	660894	30.10	23.136
2	6.66	70	81	118	69623	2704033	2195663	100.00	76.864

Sum of corrected areas: 2856557.

-530

Summary of Unknowns PBM Library Search and Quantitation

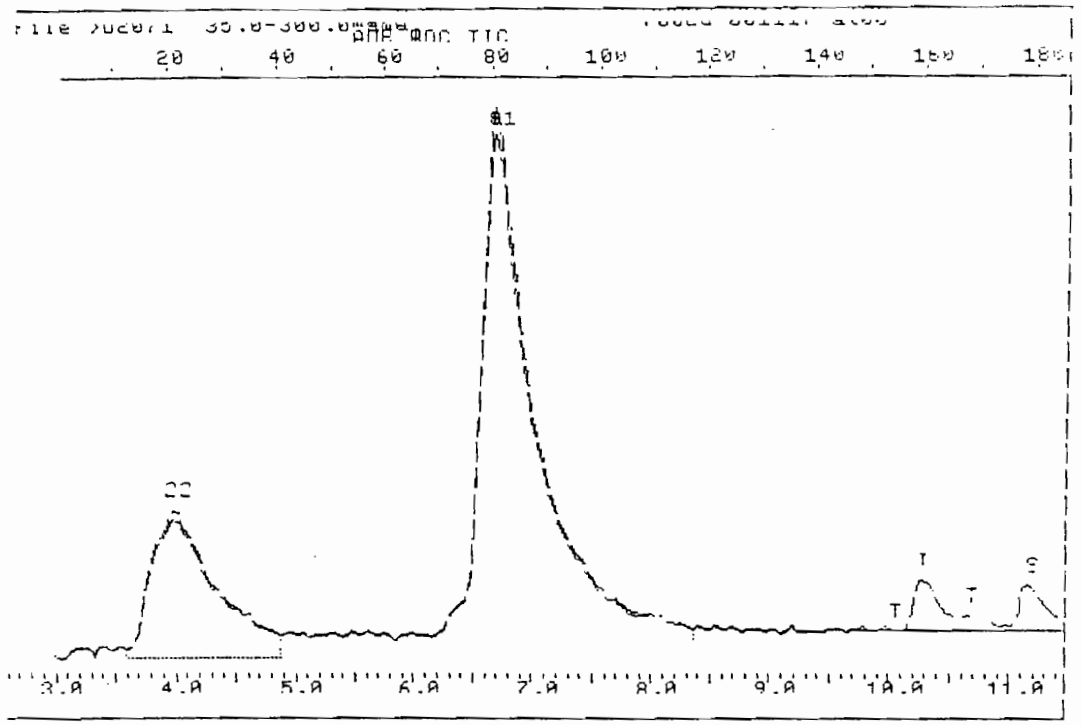
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	207641.	10.23	3.00 - 10.97
2	50.0	207641.	11.70	10.97 - 14.54
3	50.0	274549.	17.38	14.54 - 23.80

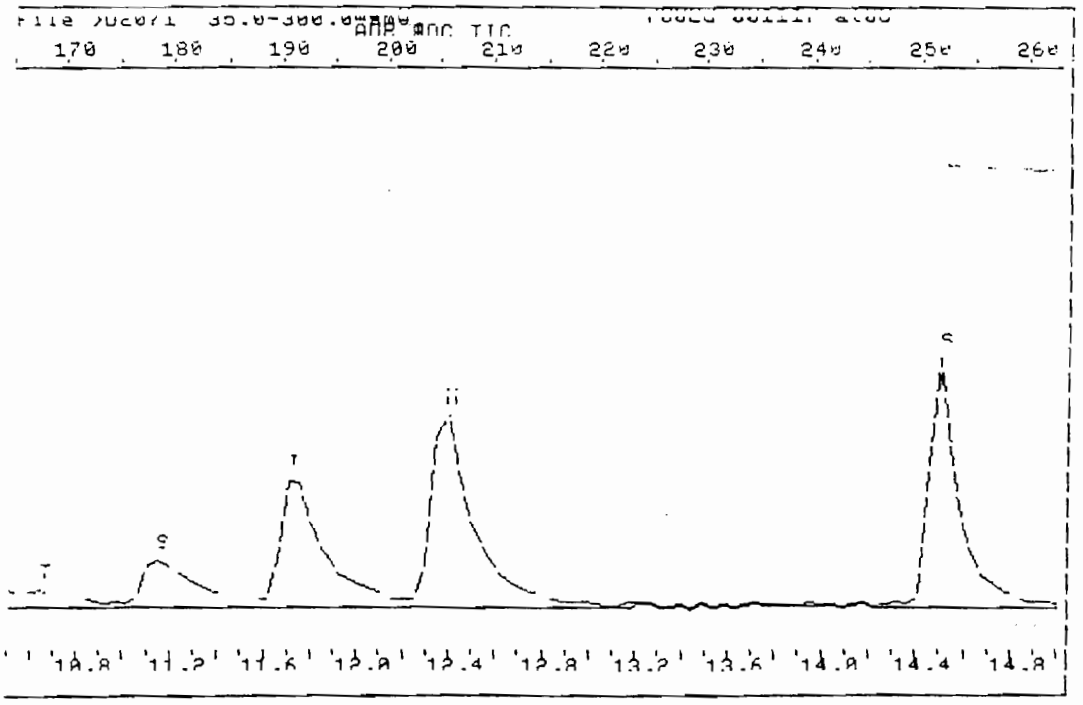
Dilution Factor = 1.00 This sample was 1000.00 g or mL

Correction Factor = 1.00

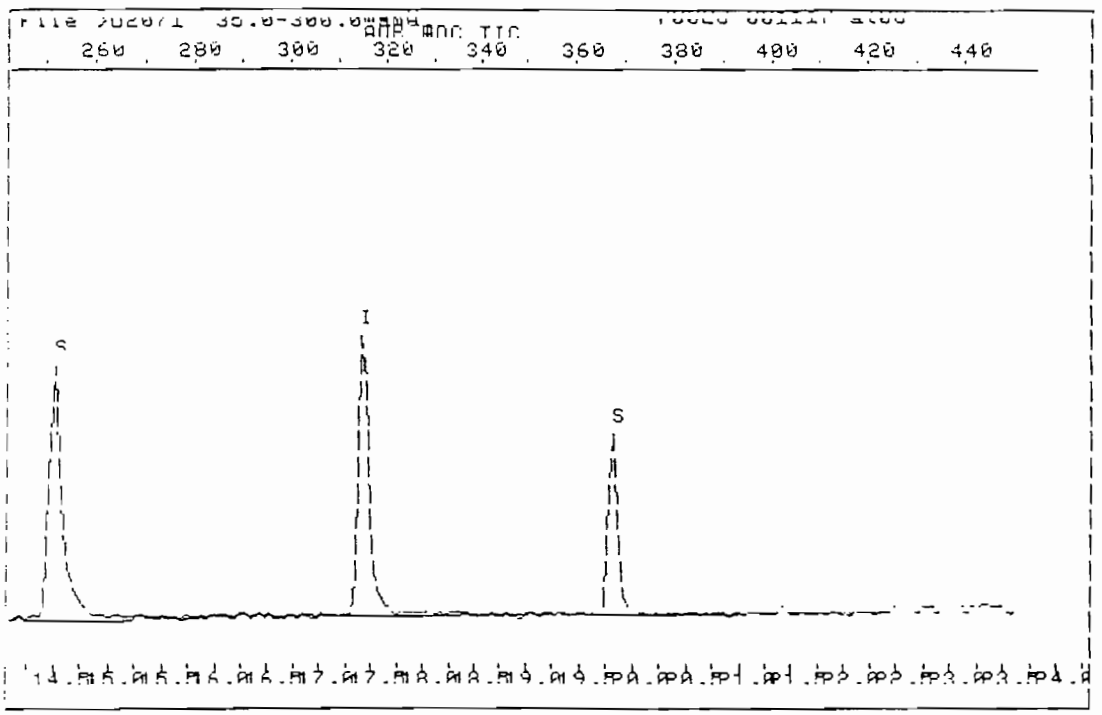
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

12:50 PM WED., 29 NOV., 2000

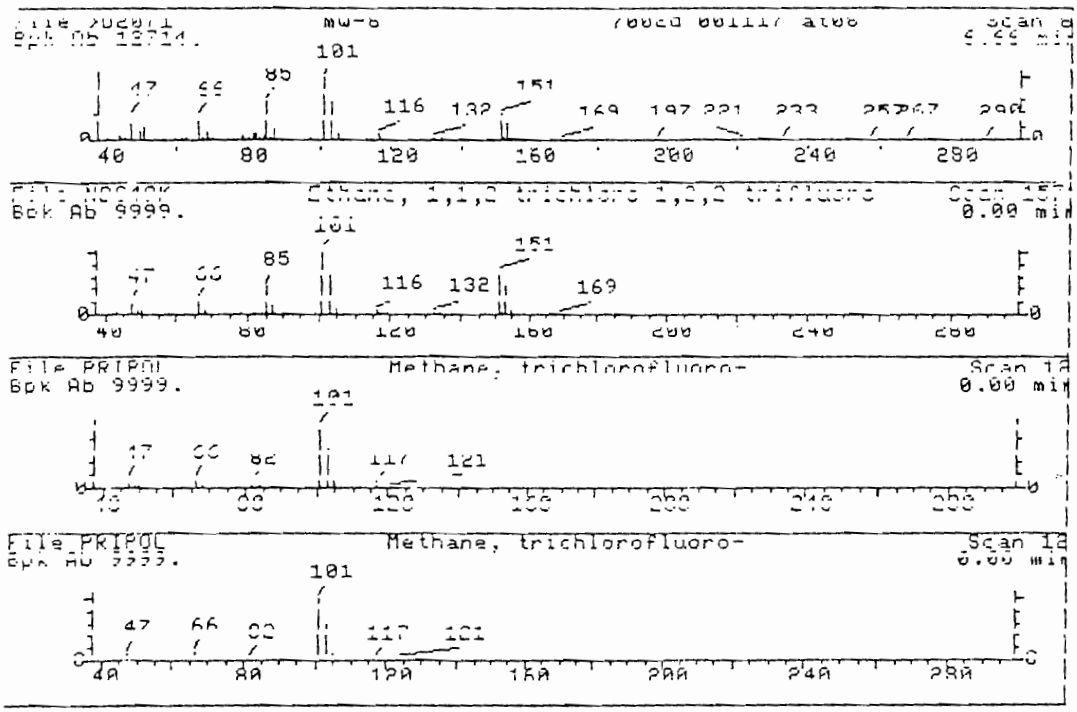




Instrument ID: 7002 Analyzed on: 11/20/00 17:45



Instrument ID: 7002 Analyzed on: 11/20/00 17:45



from 113
= 530

1. Ethane, 1,1,2-trichloro-1,2,2-trifluoro- 186 C2Cl3F3
2. Methane, trichlorofluoro- 136 CCl3F

Sample file: >D2071 Spectrum #: 81
Search speed: 1 Tilting option: F No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	IV
1.	87	76131	10367	NBS49K	116	22	2	4	96	1	63			48
2.	28	127	163	PRIPOL	66	35	2	4	100	41	8			16

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-9

Name: AES, Inc. Contract:

b Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1

trix: (soil/water) WATER Lab Sample ID: MW-9

mple wt/vol: 5.000 (g/mL) ML Lab File ID: D2072

vel: (low/med) LOW Date Received: 11/17/00

Moisture: not dec._____ Date Analyzed: 11/20/00

Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	4.	J
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	J
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	9.	
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1E

EPA SAMPLE NO.

MW-9

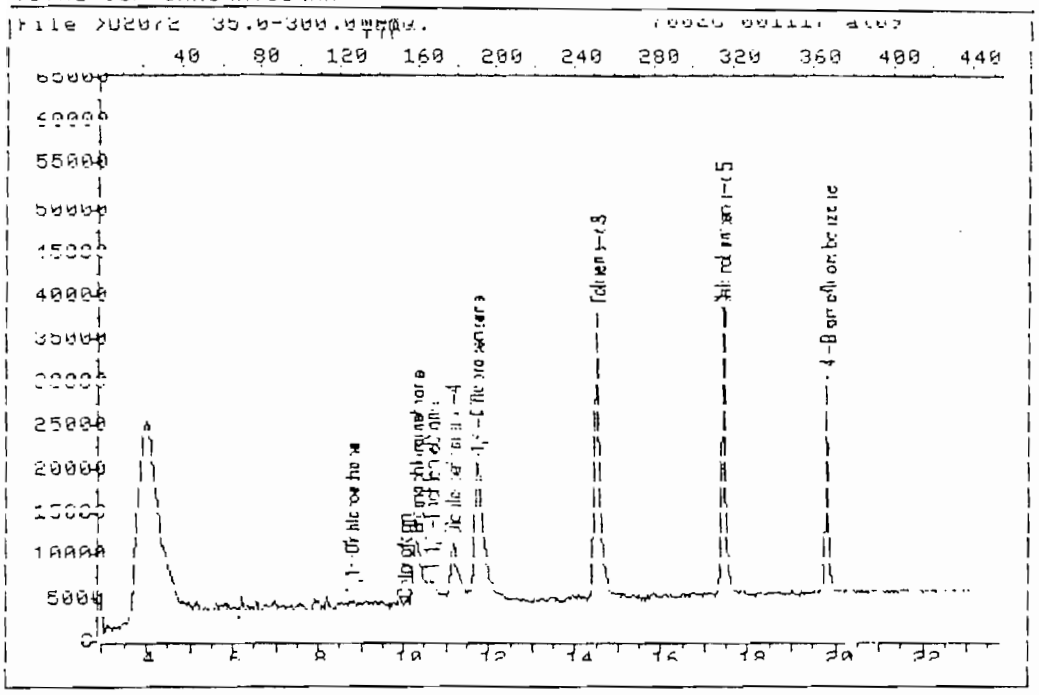
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Name: AES, Inc. Contract:
b Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
trix: (soil/water) WATER Lab Sample ID: MW-9
mple wt/vol: 5.000 (g/mL) ML Lab File ID: D2072
vel: (low/med) LOW Date Received: 11/17/00
Moisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

umber TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

TOTAL ION CHROMATOGRAM



Data File: >D2072::D4 Quant Output File: ^D2072::D3
Name: mw-9 Instrument ID: 7002 D
Misc: 7002d 001117 at09

Id File: IOSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Ucal Time: **1120 12:22

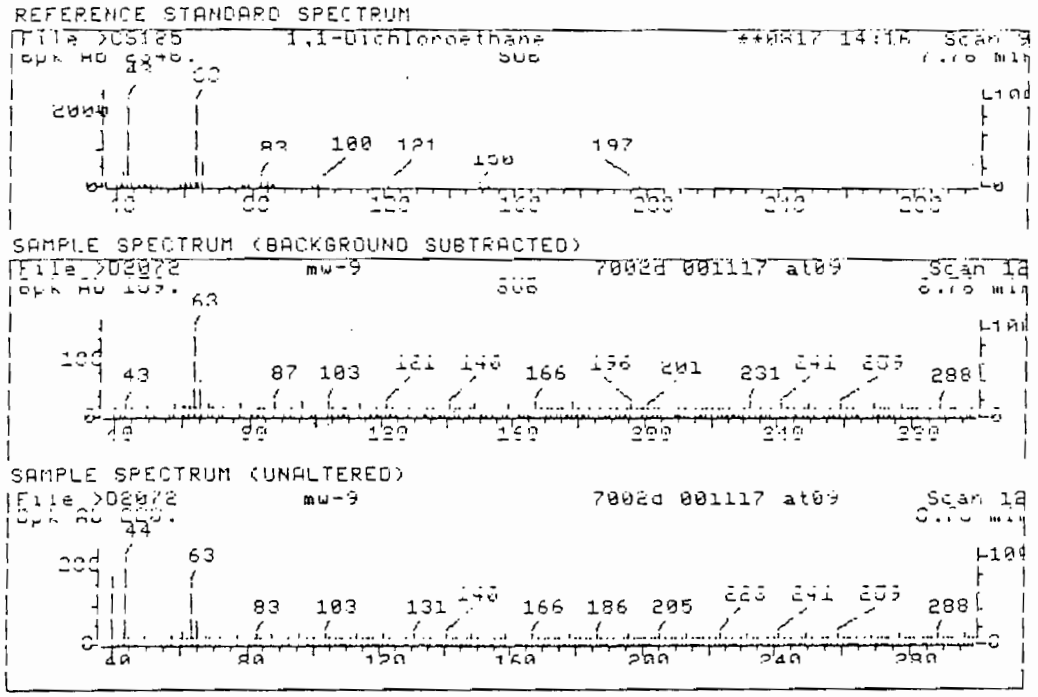
Operator ID: MANAGER
Quant Time : 001120 18:>9
Injected at: **1120 18:14

Operator ID: MANAGER Quant Rev: 7 Quant Time: 001120 18:[illegible]
Output File: ^D2072::D3 Injected at: **1120 18:14
Data File: >D2072::D4 Dilution Factor: 1.0000
Name: mw-9 Instrument ID: 7002 D
Misc: 7002d 001117 ar09

ID File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1120 12:22

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.27	128.0	10523	50.00	UG	99
15)	1,1-Dichloroethane	8.76	63.0	4439	4.19	UG	93
18)	Chloroform	9.99	83.0	4635	4.54	UG	99
19)	1,2-Dichloroethane-d4	11.14	65.0	34642	46.79	UG	100
22)	*1,4-Difluorobenzene	11.69	114.0	63259	50.00	UG	99
23)	1,1,1-Trichloroethane	10.64	97.0	6514	8.59	UG	93
36)	*Chlorobenzene-d5	17.37	117.0	58953	50.00	UG	93
42)	Toluene d-8	14.48	98.0	87959	53.32	UG	92
48)	Bromofluorobenzene	19.80	95.0	27249	50.33	UG	98

* Compound is ISTD

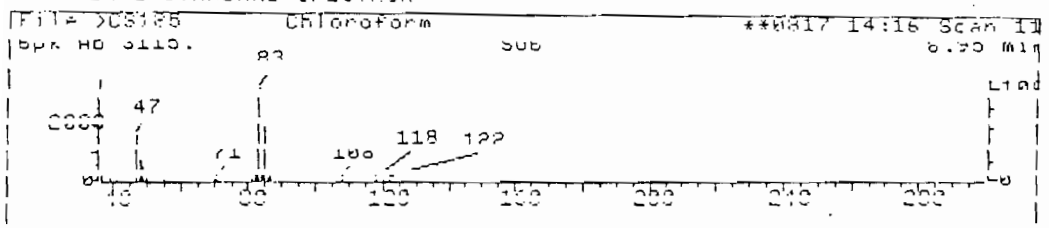


Data File: >D2072::D4
Name: mw-9
Misc: 7002d 001117 at09
Quant Time: 001120 18:39
Injected at: **1120 18:14
Last Qcal Time: **1120 12:22

Quant Output File: ^D2072::D3
Instrument ID: 7002 D
Quant ID File: IDSS91::MT
Last Calibration: 000616 12:38

Compound No : 15
Compound Name : 1,1-Dichloroethane
Scan Number : 127
Retention Time: 8.76 min.
Quant Ion : 63.0
Area : 4439
Concentration : 4.19 UG
q-value : 93

REFERENCE STANDARD SPECTRUM



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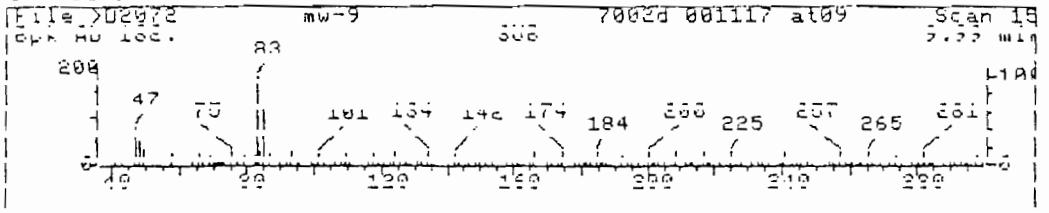
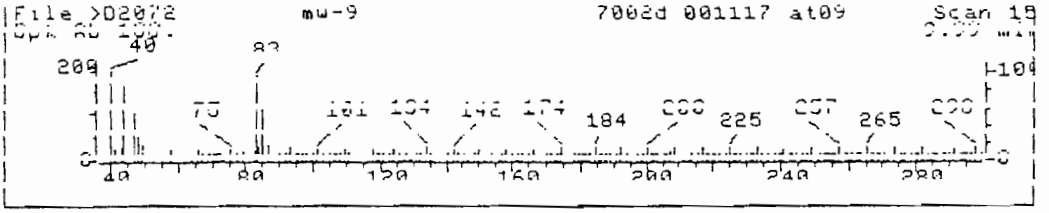


SAMPLE SPECTRUM (UNALTERED)



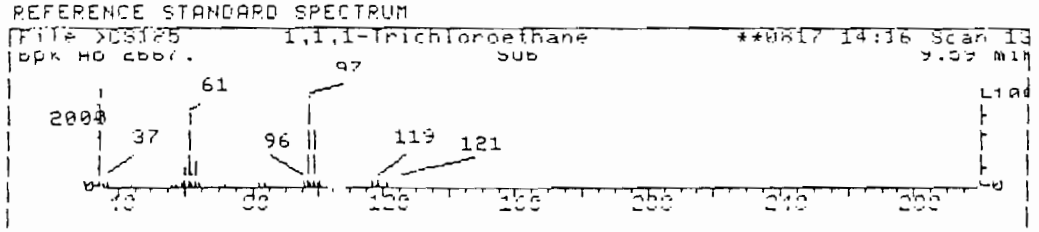
Data File: >D2072::D4
Name: mw-9
Misc: 7002d 001117 at09
Quant Time: 001120 18:39
Injected at: **1120 18:14
Last Qcal Time: **1120 12:22

Quant Output File: ^D2072::D3
Instrument ID: 7002 D

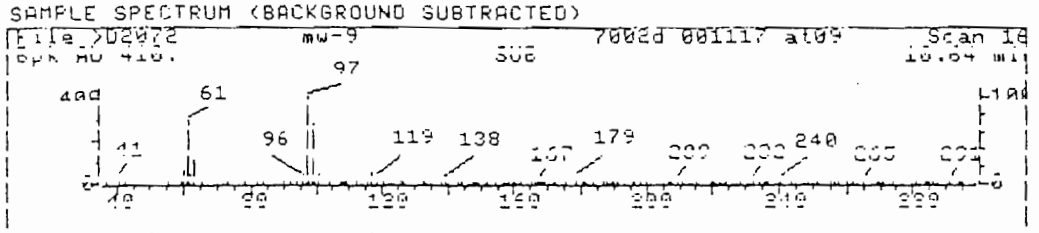
Quant ID File: IOSS91::MT
Last Calibration: 000616 12:38

Compound No : 18
Compound Name : Chloroform
Scan Number : 154
Retention Time: 9.99 min.
Quant Ion : 83.0
Area : 4535
Concentration : 4.54 UG
q-value : 79

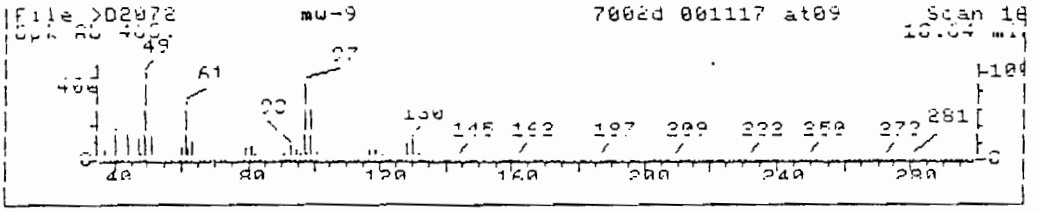
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >D2072::D4 Quant Output File: ^D2072::D3
Name: mw-9 Instrument ID: 7002 D
Misc: 7002d 001117 at09
Quant Time: 001120 18:39 Quant ID File: IDSS91::MT
Injected at: **1120 18:14 Last Calibration: 000616 12:38
Last Qcal Time: **1120 12:22

Compound No : 23
Compound Name : 1,1,1-Trichloroethane
Scan Number : 168
Retention Time: 10.64 min.
Quant Ion : 97.0
Area : 6514
Concentration : 8.59 UG
q-value : 93

MS data file header from : >D2072::D4

Sample: mw-9 Operator: MANAGER SUPER GRP. 11/20/00 18:14
Misc : 7002d 001117 at09
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7002 D
Method file: METH04 Tuning file: MT9110D No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	230.	230.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0

>D2072 mw-9 7002d 001117 at09
35.01 300.0 CLP TIC
Upslope: .2000 Area Reject: 9883. Max Peaks: 5 Bunch: -1 Valley >100 %
Onslope: 0.0000 Results File ID2072 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	4.00	10	23	43	24223	991086	862495	100.00	94.109
2	6.19	70	71	73	2308	34902	11225	1.30	1.225
3	7.89	106	108	113	1427	80249	14045	1.63	1.532
4	8.53	119	122	124	973	60456	12287	1.42	1.34
5	12.83	215	216	220	1488	63862	16432	1.91	1.7

Sum of corrected areas: 916484.

Summary of Unknowns PBM Library Search and Quantitation

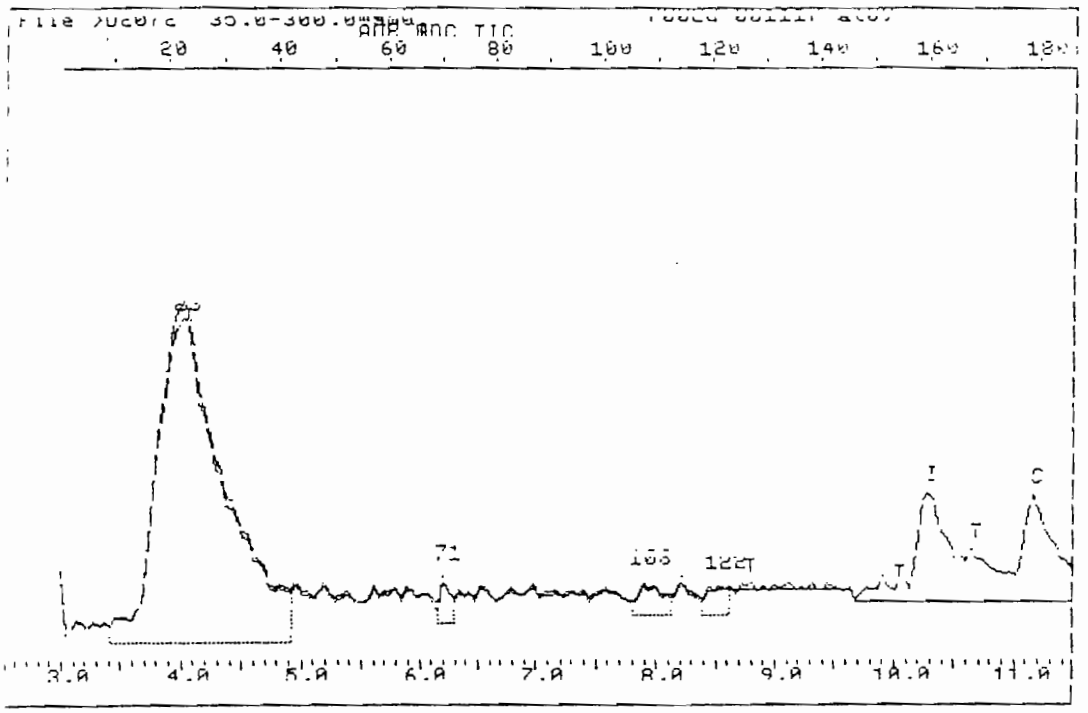
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	98834.	10.27	2.99 - 10.98
2	50.0	228220.	11.69	10.98 - 14.53
3	50.0	276365.	17.37	14.53 - 23.79

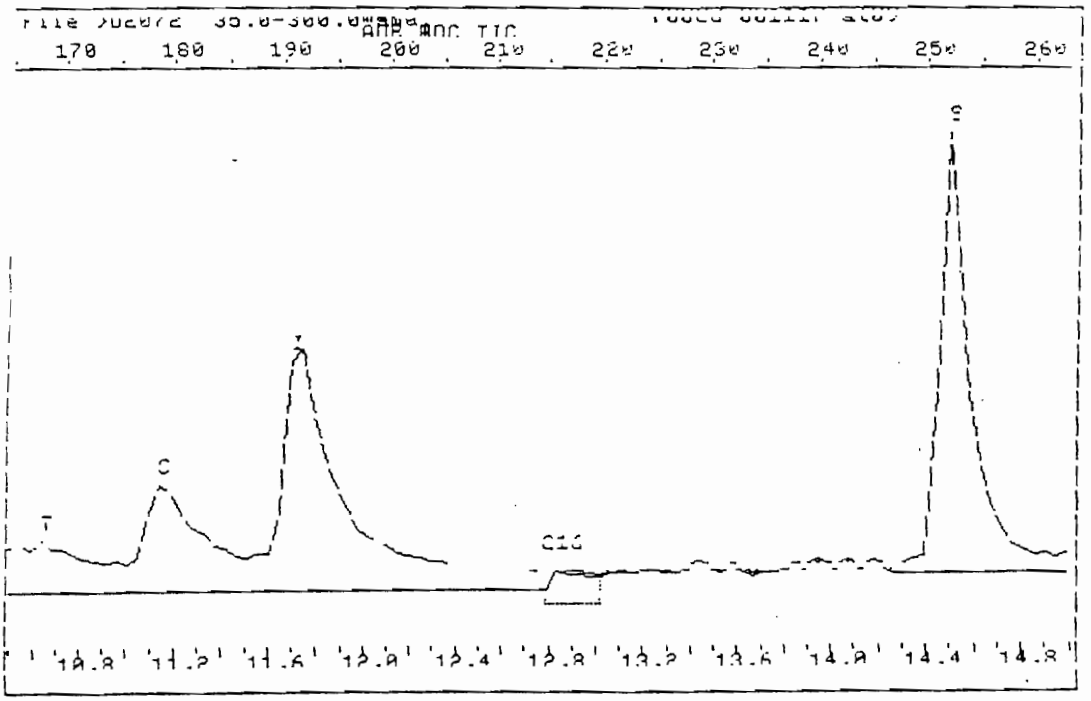
Dilution Factor = 1.00 This sample was 1000.00 g or mL

Correction Factor = 1.00

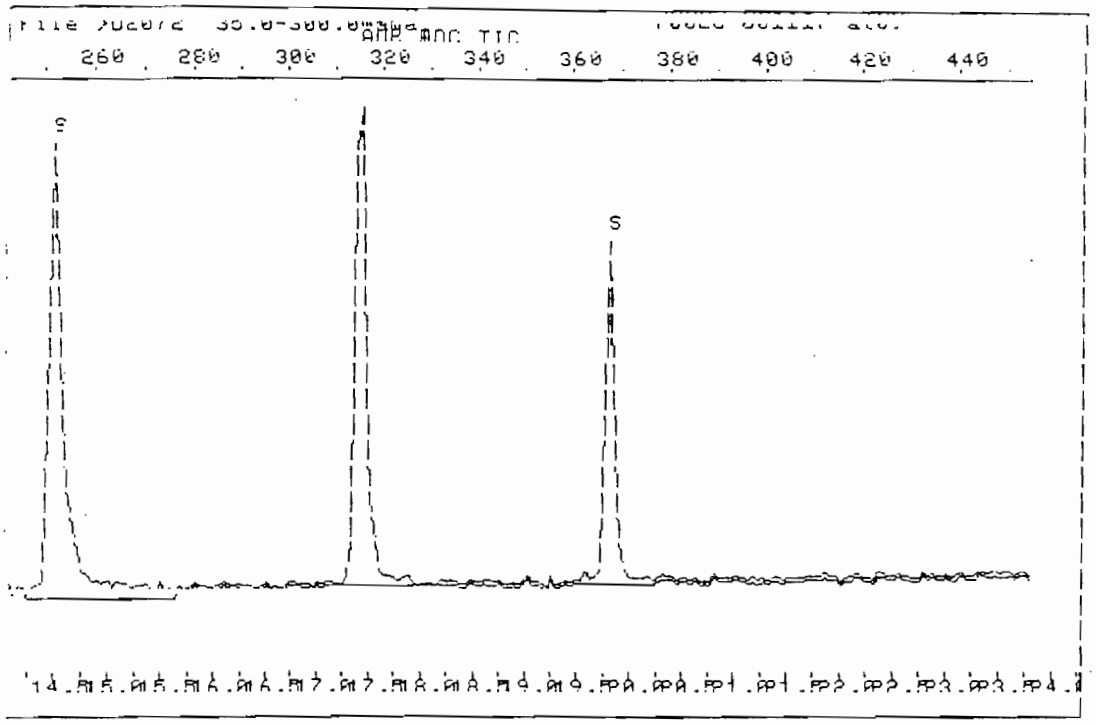
$$\text{Unknown Concentration} = \frac{|\text{Conc Int Std} * \text{Area Unknown}|}{|\text{Area Int Std}|} * \text{Correction Factor}$$

1:00 PM WED., 29 NOV., 2000





Instrument ID: 700x Analyzed on: 11/20/00 18:14



Instrument ID: 7002 Analyzed on: 11/20/00 18:14

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FD111700

Name: AES, Inc. Contract:

Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1

rix: (soil/water) WATER Lab Sample ID: FD111700

ple wt/vol: 5.000 (g/mL) ML Lab File ID: D2073

el: (low/med) LOW Date Received: 11/17/00

oisture: not dec._____ Date Analyzed: 11/20/00

Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	3.	J
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	16.	
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	180.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1E

EPA SAMPLE NO.

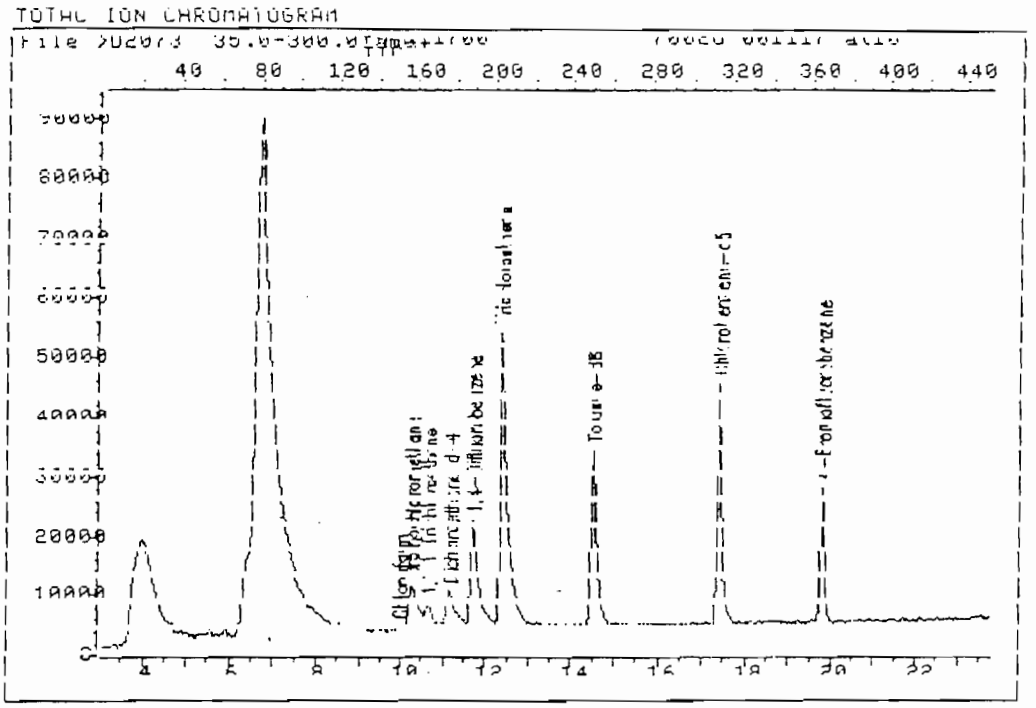
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FD111700

› Name: AES, Inc. Contract:
› Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
:rix: (soil/water) WATER Lab Sample ID: FD111700
nple wt/vol: 5.000 (g/mL) ML Lab File ID: D2073
/el: (low/med) LOW Date Received: 11/17/00
Moisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

umber TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	76-13-1	Ethane,1,1,2-Trichloro,1,2,2	6.67	710	JN
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					



Data File: >D2073::D4 Quant Output File: ^D2073::D3
Name: fd 111700 Instrument ID: 7002 D
Misc: 7002d 001117 at10

Id File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1120 12:22

Operator ID: MANAGER
Quant Time : 001120 19:08
Injected at: **1120 18:44

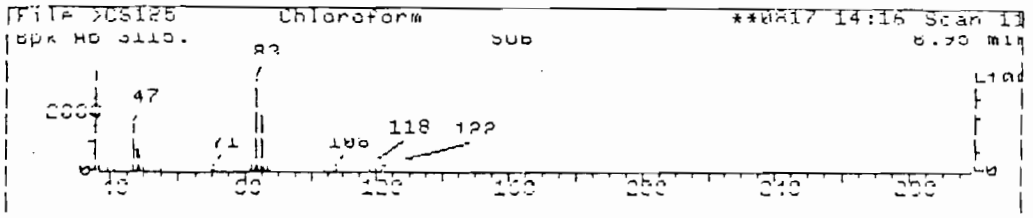
Operator ID: MANAGER Quant Rev: 7 Quant Time: 001120 19:08
Output File: ^D2073::D3 Injected at: **1120 18:44
Data File: >D2073::D4 Dilution Factor: 1.00000
Name: fd 111700 Instrument ID: 7002 D
Misc: 7002d 001117 at10

ID File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1120 12:22

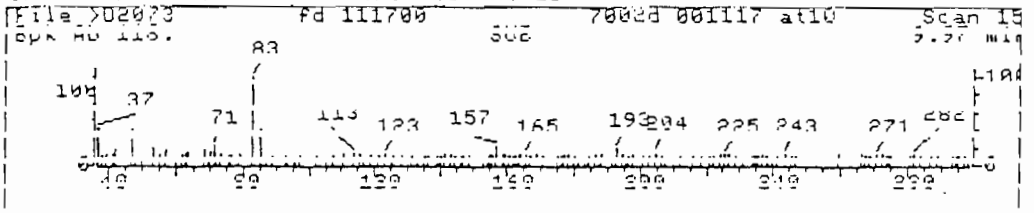
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.24	128.0	8931	50.00	UG	98
18)	Chloroform	9.97	83.0	2867	3.38	UG	68
19)	1,2-Dichloroethane-d4	11.16	65.0	33603	53.48	UG	100
22)	*1,4-Difluorobenzene	11.71	114.0	61662	50.00	UG	95
23)	1,1,1-Trichloroethane	10.66	97.0	12147	16.43	UG	88
29)	Trichloroethene	12.35	130.0	73226	184.98	UG	91
36)	*Chlorobenzene-d5	17.39	117.0	58401	50.00	UG	92
42)	Toluene d-8	14.50	98.0	83625	50.81	UG	94
48)	Bromofluorobenzene	19.78	95.0	27753	51.19	UG	91

* Compound is ISTD

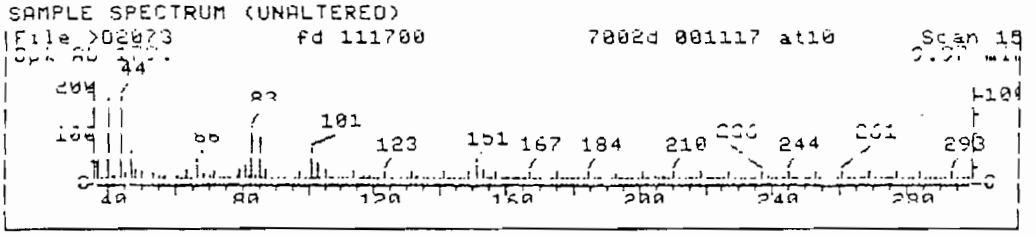
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



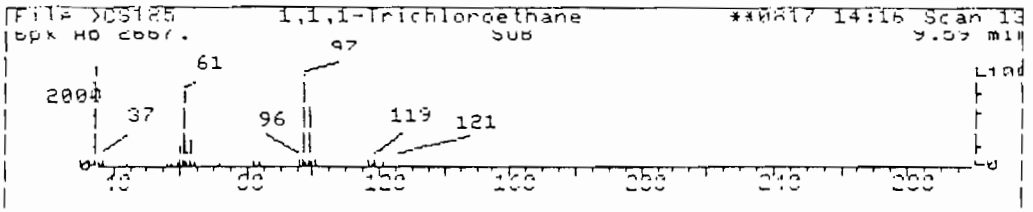
Data File: >D2073::D4
Name: fd 111700
Misc: 7002d 001117 at10
Quant Time: 001120 19:08
Injected at: **1120 18:44
Last Qcal Time: **1120 12:22

Quant Output File: ^D2073::D3
Instrument ID: 7002 D

Quant ID File: IDSS91::MT
Last Calibration: 000616 12:38

Compound No : 18
Compound Name : Chloroform
Scan Number : 152
Retention Time: 9.97 min.
Quant Ion : 83.0
Area : 2867
Concentration : 3.38 UG
q-value : 68

REFERENCE STANDARD SPECTRUM



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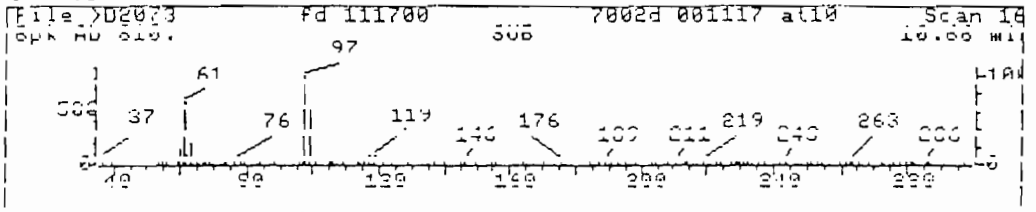

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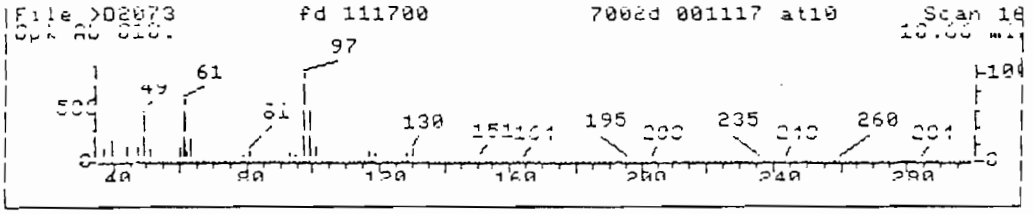
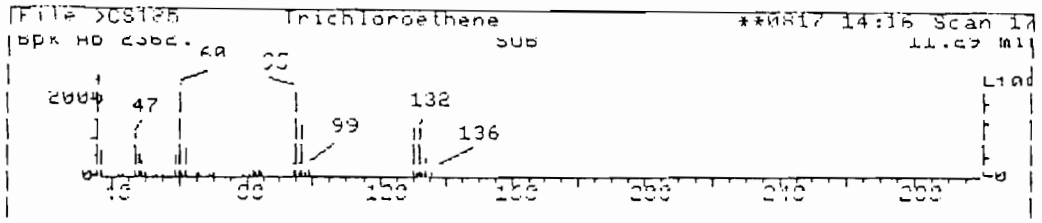


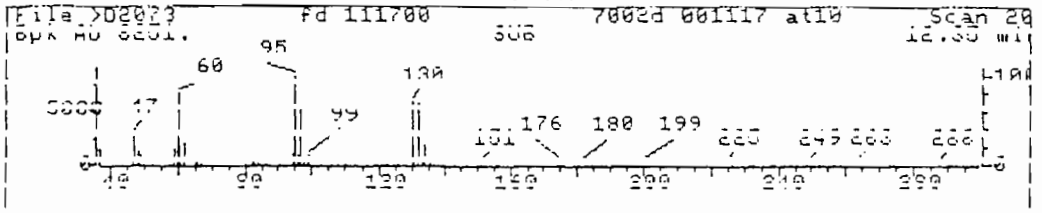
Data File: >D2073::D4 Quant Output File: ^D2073::D3
Name: fd 111700 Instrument ID: 7002 D
Misc: 7002d 001117 at10
Quant Time: 001120 19:08 Quant ID File: IDSS91::MT
Injected at: **1120 18:44 Last Calibration: 000616 12:38
Last Qcal Time: **1120 12:22

Compound No : 23
Compound Name : 1,1,1-Trichloroethane
Scan Number : 167
Retention Time: 10.66 min.
Quant Ion : 97.0
Area : 12147
Concentration : 16.43 UG
q-value : 88

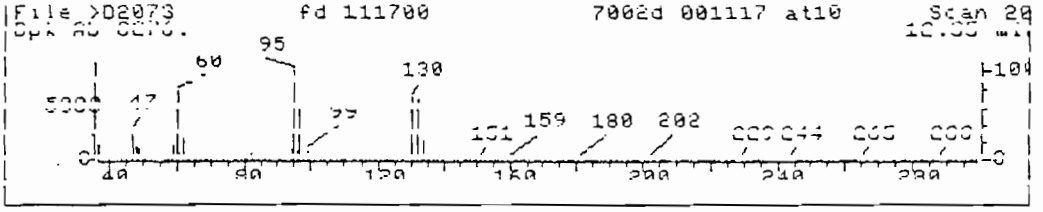
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >D2073::D4
Name: fd 111700
Misc: 7002d 001117 at10
Quant Time: 001120 19:08
Injected at: **1120 18:44
Last Qcal Time: **1120 12:22

Quant Output File: ^D2073::D3
Instrument ID: 7002 D

Quant ID File: IDSS91::MT
Last Calibration: 000616 12:38

Compound No : 29
Compound Name : Trichloroethene
Scan Number : 204
Retention Time: 12.35 min.
Quant Ion : 130.0
Area : 73226
Concentration : 184.98 UG
q-value : 91

MS data file header from : >02073::D4

Sample: fd 111700 Operator: MANAGER SUPER GRP. 11/20/00 18:44
Misc : 7002d 001117 at10
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7002 D
Method file: METH04 Tuning file: MT900D No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	290.	230.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0

>02073 fd 111700 7002d 001117 at10
35.01 300.0 CLP TIC
Upslope: .2000 Area Reject: 21082. Max Peaks: 2 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File ID2073 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	3.97	9	21	39	18147	761938	663011	22.21	18.171
2	6.67	67	80	118	87025	3383734	2985810	100.00	81.829

Sum of corrected areas: 3648821.

=710

Summary of Unknowns PBM Library Search and Quantitation

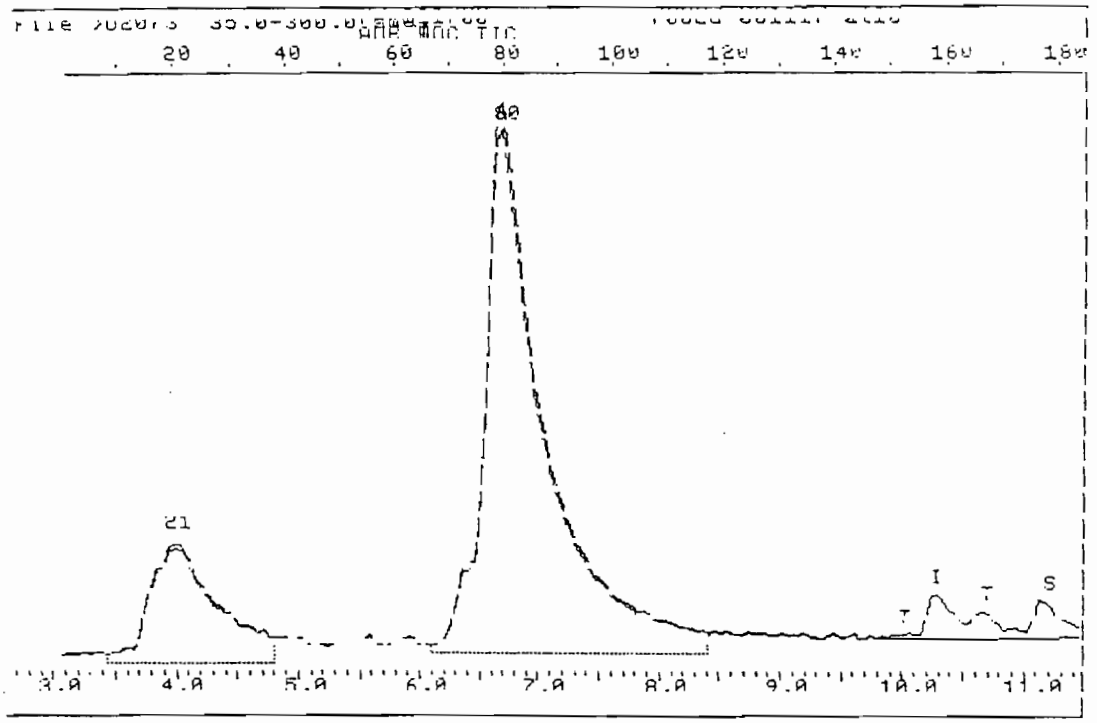
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	210820.	10.24	3.06 - 10.98
2	50.0	210820.	11.71	10.98 - 14.55
3	50.0	268432.	17.39	14.55 - 23.81

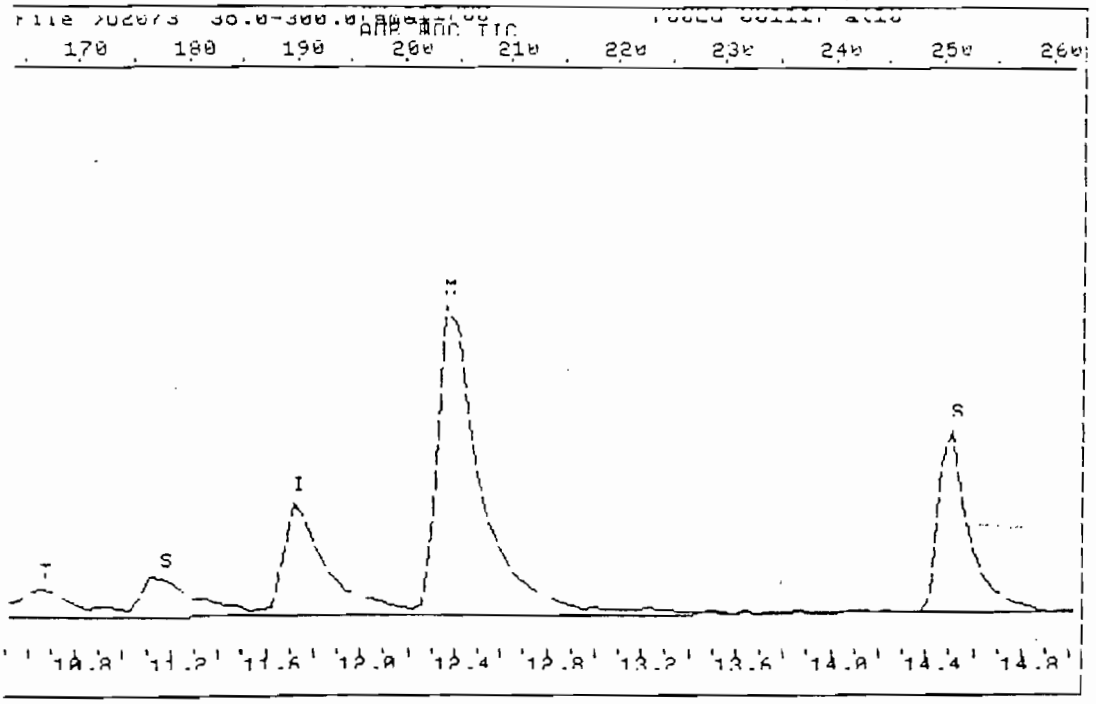
Dilution Factor = 1.00 This sample was 1000.00 g or mL

Correction Factor = 1.00

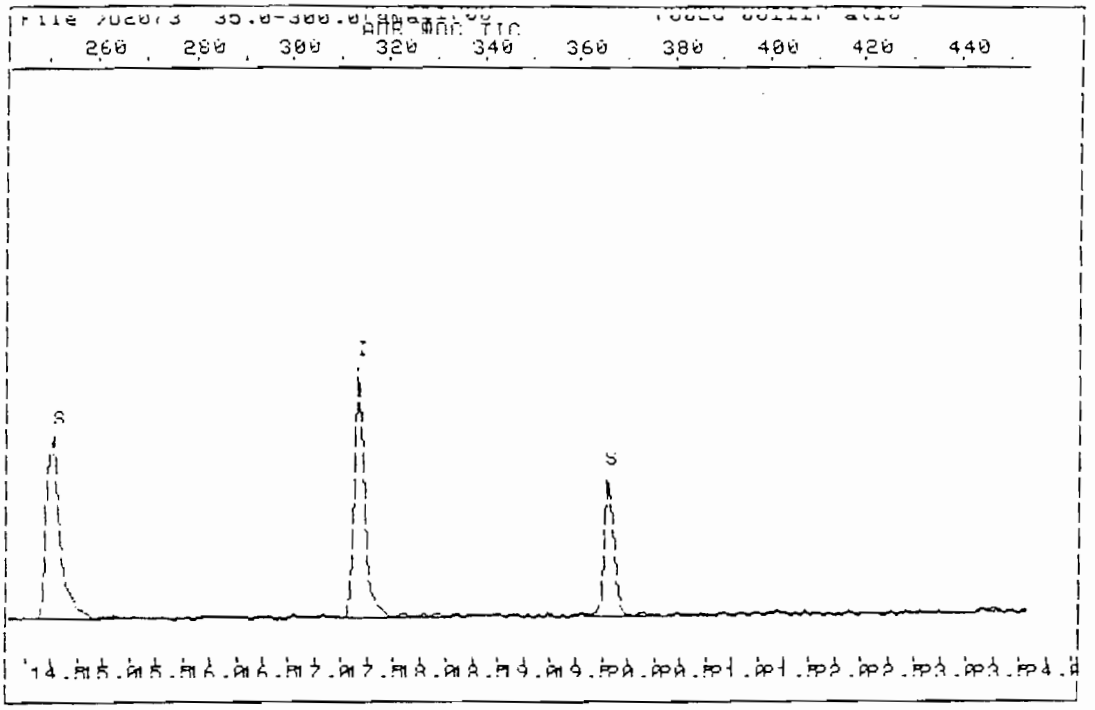
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

1:13 PM WED., 29 NOV., 2000

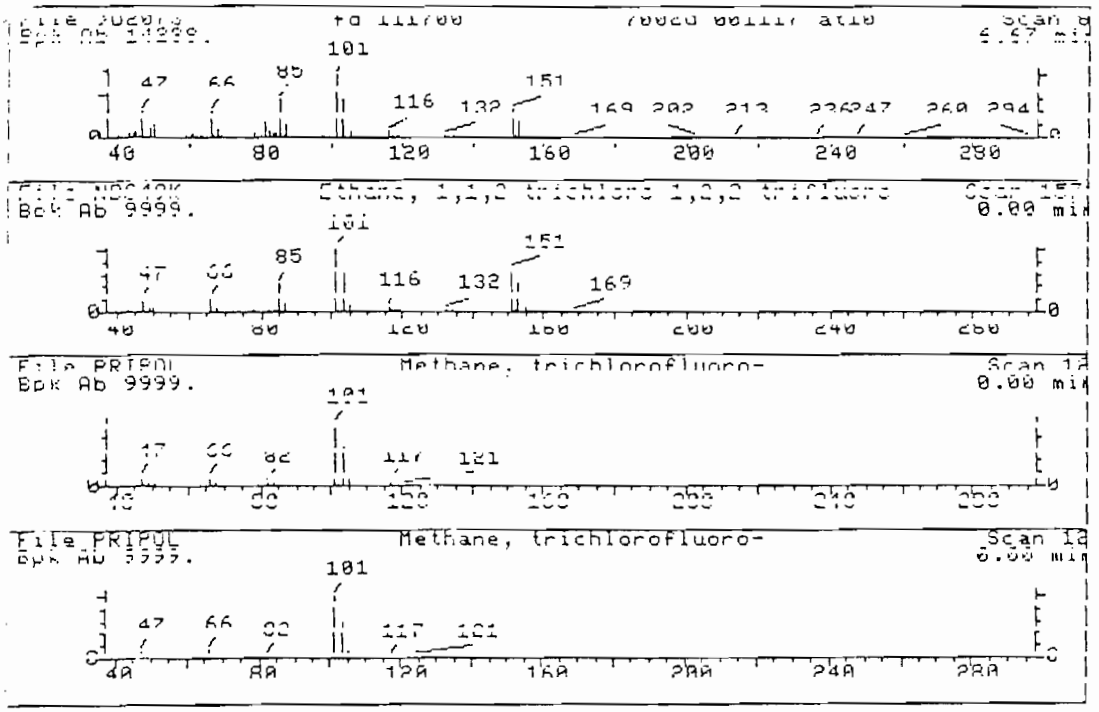




Instrument ID: 7002 Analyzed on: 11/20/00 18:44



Instrument ID: 7002 Analyzed on: 11/20/00 18:44



Area 113
= 710 ug/L

1. Ethane, 1,1,2-trichloro-1,2,2-trifluoro- 186 C2Cl3F3
2. Methane, trichlorofluoro- 136 CCl3F

Sample file: >D2073 Spectrum #: 80
Search speed: 1 Tilting option: F No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	IV
1.	87	76131	10367	NBS49K	116	22	2	4	100	2	63			48
2.	15	127	163	PRIPOL	34	67	0	0	100	57	3			15

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB

Name: AES, Inc. Contract:

Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1

trix: (soil/water) WATER Lab Sample ID: TB

mple wt/vol: 5.000 (g/mL) ML Lab File ID: D2074

vel: (low/med) LOW Date Received: 11/17/00

Moisture: not dec._____ Date Analyzed: 11/20/00

Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	3.	J
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

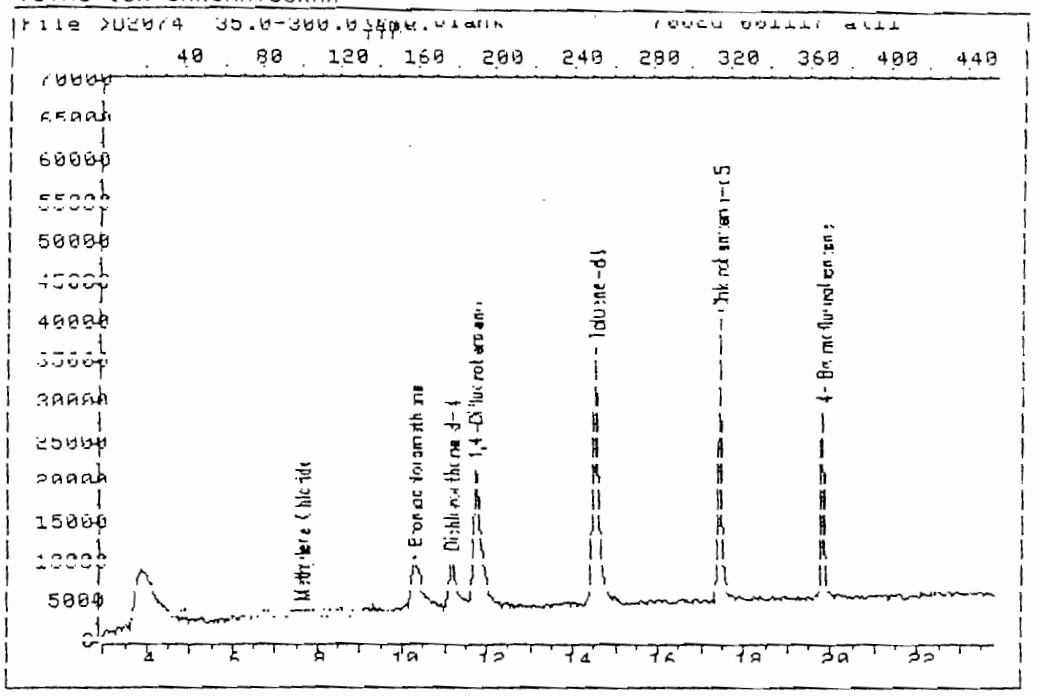
TB

b Name: AES, Inc. Contract:
b Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
trix: (soil/water) WATER Lab Sample ID: TB
mple wt/vol: 5.000 (g/mL) ML Lab File ID: D2074
vel: (low/med) LOW Date Received: 11/17/00
Moisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

umber TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

TOTAL ION CHROMATOGRAM



Data File: >D2074::D4 Quant Output File: ^D2074::D3
Name: trip blank Instrument ID: 7002 D
Misc: 7002d 001117 at11

Id File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1120 12:22

Operator ID: MANAGER
Quant Time : 001120 19:37
Injected at: **1120 19:13

QUANT REPORT Page 1

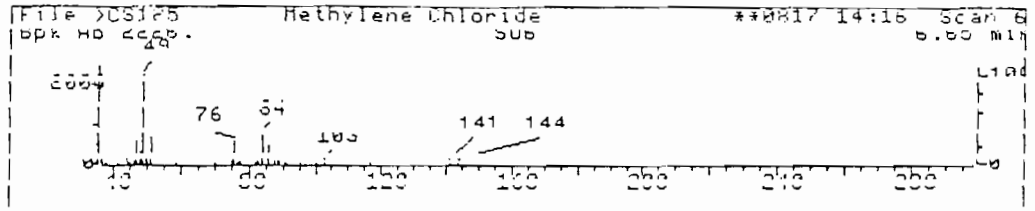
Operator ID: MANAGER Quant Rev: 7 Quant Time: 001120 19:32
Output File: ^D2074::D3 Injected at: **1120 19:13
Data File: >D2074::D4 Dilution Factor: 1.00000
Name: trip blank Instrument ID: 7002 D
Misc: 7002d 001117 at11

ID File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1120 12:22

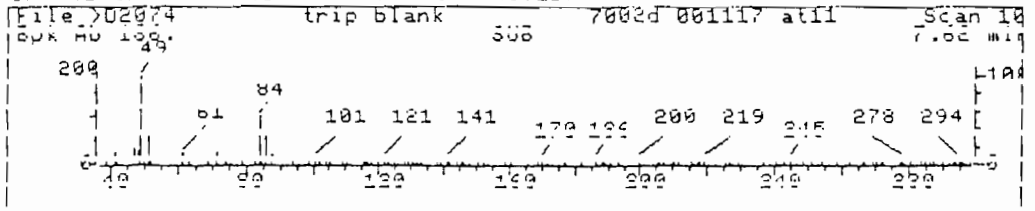
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.28	128.0	9729	50.00	UG	87
6)	Methylene Chloride	7.62	84.0	1329	3.24	UG	63
19)	1,2-Dichloroethane-d4	11.15	65.0	33509	48.95	UG	100
22)	*1,4-Difluorobenzene	11.70	114.0	61488	50.00	UG	95
36)	*Chlorobenzene-d5	17.38	117.0	58098	50.00	UG	94
42)	Toluene d-8	14.49	98.0	82868	50.61	UG	96
48)	Bromofluorobenzene	19.81	95.0	27776	51.50	UG	96

* Compound is ISTD

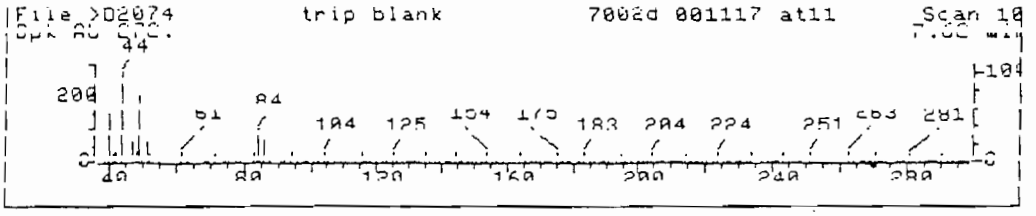
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >D2074::D4 Quant Output File: ^D2074::D3
Name: trip blank Instrument ID: 7002 D
Misc: 7002d 001117 at11
Quant Time: 001120 19:37 Quant ID File: IDSS91::MT
Injected at: **1120 19:13 Last Calibration: 000616 12:38
Last Qcal Time: **1120 12:22

Compound No : 6
Compound Name : Methylene Chloride
Scan Number : 102
Retention Time: 7.62 min.
Quant Ion : 84.0
Area : 1329
Concentration : 3.24 UG
q-value : 63

MS data file header from : >D2074::D4

Sample: trip blank Operator: MANAGER SUPER GRP. 11/20/00 19:13
Misc : 7002d 001117 at11
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7002 D
Method file: METH04 Tuning file: MT900D No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	250.	250.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0

>D2074 trip blank 7002d 001117 at11
35.01 300.0 CLP TIC
Upslope: .2000 Area Reject: 10223. Max Peaks: 2 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File ID2074 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	3.87	14	20	39	7769	373756	289310	100.00	95.150
2	4.88	39	42	44	1992	46238	14812*	5.12	4.870

Sum of corrected areas: 304122.

Summary of Unknowns PBM Library Search and Quantitation

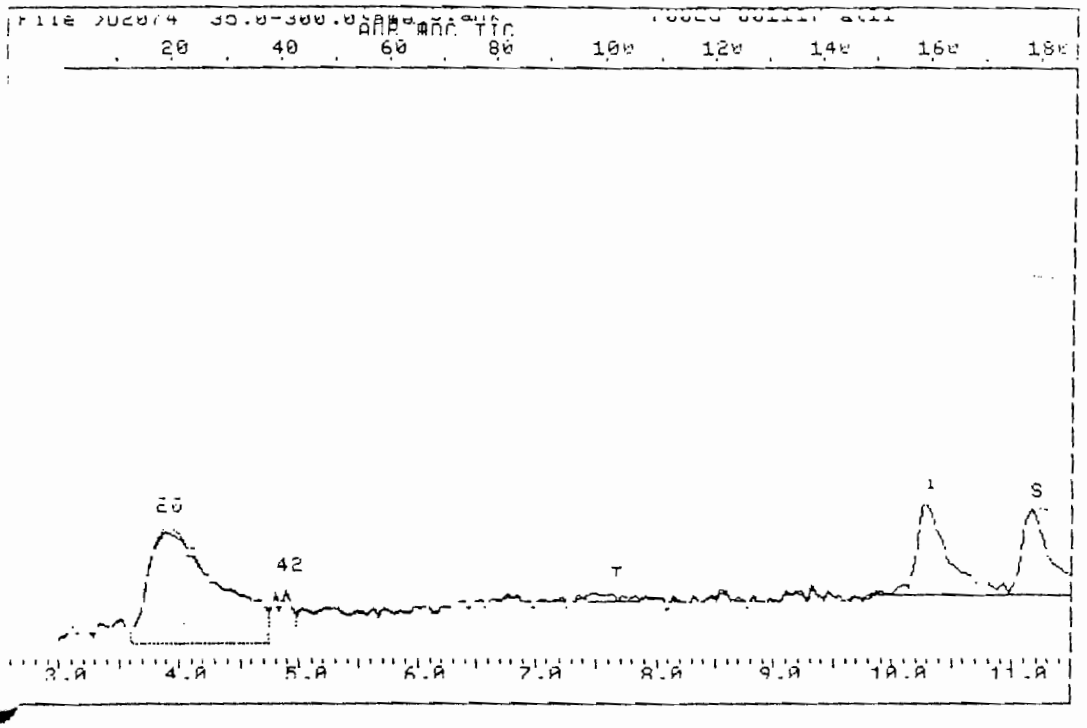
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	102232.	10.28	3.00 - 10.99
2	50.0	224303.	11.70	10.99 - 14.54
3	50.0	272752.	17.38	14.54 - 23.80

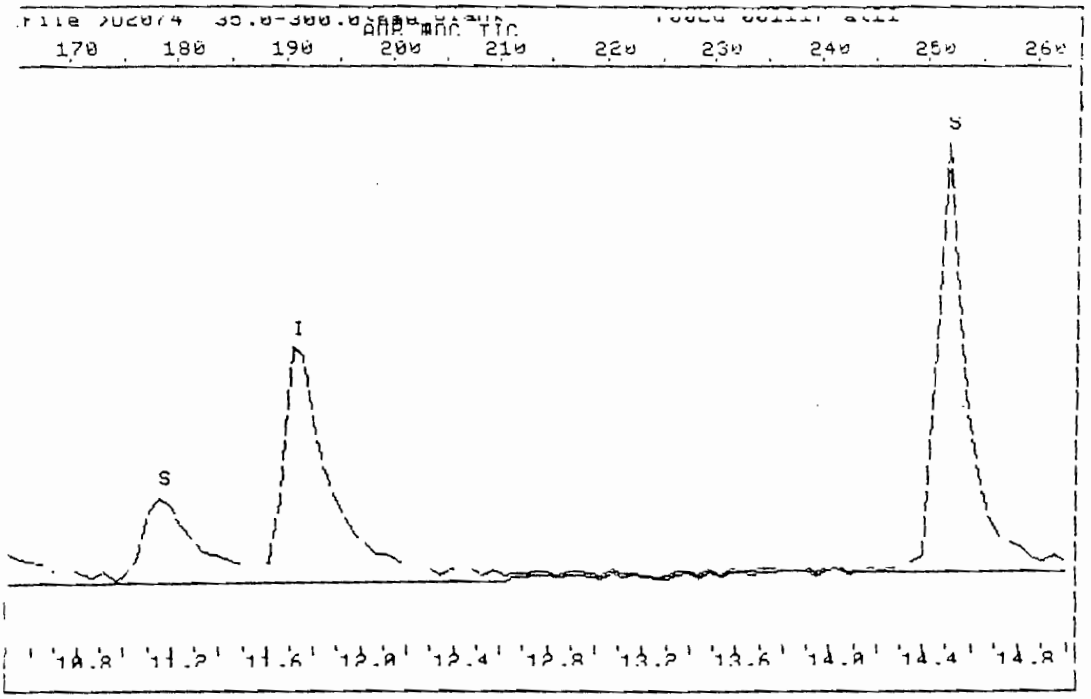
Dilution Factor = 1.00 This sample was 1000.00 g or mL

Correction Factor = 1.00

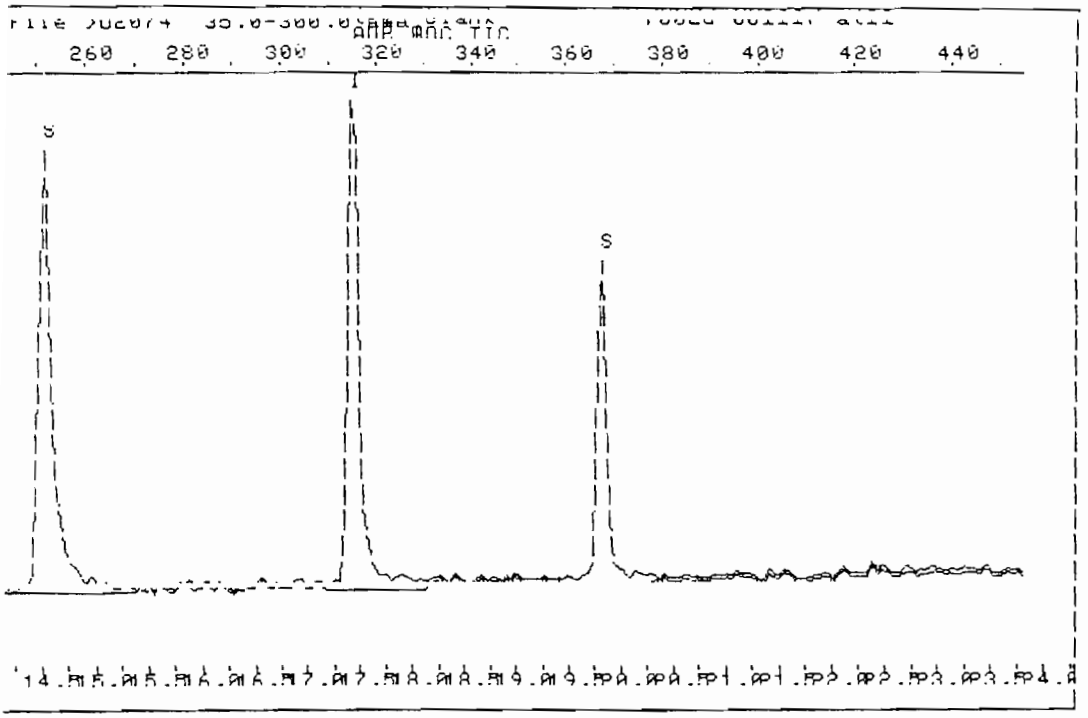
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

1:24 PM WED., 29 NOV., 2000





Instrument ID: 7002 Analyzed on: 11/20/00 19:13



Instrument ID: 7002 Analyzed on: 11/20/00 19:13

STANDARDS

DATA

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

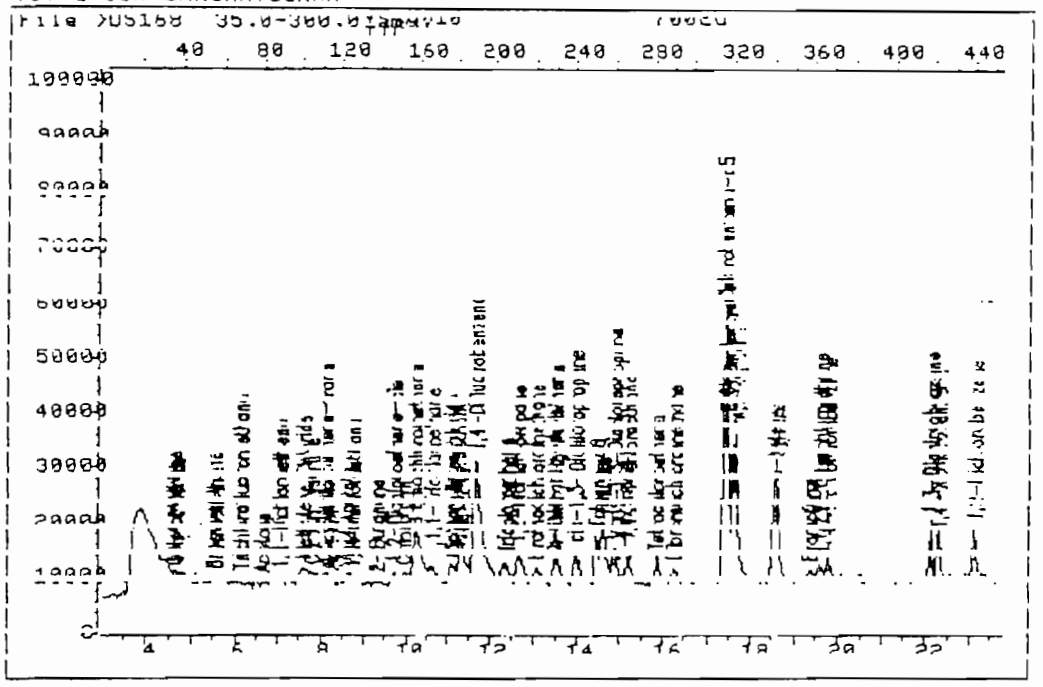
) Name: AES, Inc. Contract:
Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
,trument ID: H5970 D Calibration Date(s): 11/14/00 11/14/00
ıted Purge: (Y/N) N Calibration Times: 11:32 13:30
Column: RTX502.2 ID: .32 (mm)

\B FILE ID: RRF010= DS168 RRF020= DS169
ŁF050= DS170 RRF100= DS171 RRF200= DS172

COMPOUND	RRF010	RRF020	RRF050	RRF100	RRF200	$\overline{RRF}$	%RSD
ıloromethane	1.775	1.558	1.671	1.029	.870	1.381	29.3
:omomethane *	.597	.721	.656	.648	.438	.612	17.5*
.nyl Chloride *	1.357	1.215	1.585	1.006	1.092	1.251	18.3*
ıloroethane	1.171	1.137	.913	.862	.520	.920	28.4
:thylene Chloride	3.326	2.292	2.308	1.988	1.583	2.299	28.1
:etone	1.515	.972	1.056	.902	1.005	1.090	22.4
ırbon Disulfide	3.674	2.996	3.451	3.074	2.654	3.170	12.6
1-Dichloroethene *	1.063	.758	.999	.911	.782	.903	14.7*
1-Dichloroethane *	4.571	3.968	4.804	4.302	3.894	4.308	9.0*
2-Dichloroethene-trans	1.522	1.433	2.138	1.572	1.417	1.616	18.5
ıloroform *	5.273	4.228	5.021	4.209	3.868	4.520	13.2*
2-Dichloroethane *	4.590	3.737	4.596	4.611	4.066	4.320	9.2*
-Butanone	3.170	2.366	2.951	2.573	2.533	2.719	12.2
1,1-Trichloroethane *	.679	.636	.564	.552	.556	.597	9.6*
ırbon Tetrachloride *	.509	.472	.414	.443	.431	.454	8.3*
omodichloromethane *	.756	.685	.622	.589	.588	.648	11.1*
,2-Dichloropropane	.715	.583	.558	.559	.554	.594	11.5
.s-1,3-Dichloropropene *	.766	.840	.762	.751	.746	.773	5.0*
:ichloroethene *	.346	.377	.307	.287	.286	.320	12.3*
ibromochloromethane *	.312	.320	.310	.291	.274	.301	6.2*
,1,2-Trichloroethane *	.426	.370	.317	.326	.306	.349	14.1*
ənzene *	2.023	1.853	1.726	1.665	1.631	1.780	9.0*
:ans-1,3-Dichloropropene *	.665	.662	.640	.656	.658	.656	1.5*
:omoform *	.177	.168	.148	.128	.122	.149	16.2*
-Methyl-2-Pentanone	1.268	1.290	1.241	1.020	1.233	1.210	9.0
-Hexanone	.572	.628	.545	.496	.537	.556	8.7
ətrachloroethene *	.334	.232	.231	.226	.215	.248	19.8*
,1,2,2-Tetrachloroethane *	.498	.530	.449	.434	.429	.468	9.4*
ɔluene *	2.005	1.839	1.784	1.819	1.806	1.851	4.8*
hlorobenzene *	1.010	1.047	.919	.896	.853	.945	8.6*
thylbenzene *	.562	.518	.498	.424	.442	.489	11.5*
tyrene *	1.231	1.205	1.109	1.121	1.079	1.149	5.7*
ɔluene d-8	1.574	1.478	1.396	1.403	1.418	1.454	5.1
romofluorobenzene *	.499	.498	.467	.476	.458	.480	3.9*
,2-Dichloroethane-d4	3.690	3.314	3.733	3.279	3.029	3.409	8.7
,2-Dichloroethene-cis	4.845	4.140	4.340	3.947	3.605	4.176	11.1
,p-Xylenes	.757	.711	.643	.660	.594	.673	9.3
-Xylene *	.747	.770	.643	.657	.608	.685	10.2*

ompounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of .010.

TOTAL ION CHROMATOGRAM



Data File: >DS168::D4 Quant Output File: ^DS168::SS
Name: vstd010 Instrument ID: 7002 D
Misc: 7002d

Id File: IDSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 001016 13:39 Last Qcal Time: <none>

Operator ID: MANAGER
Quant Time : 001114 11:57
Injected at: **1114 11:32

Operator ID: MANAGER Quant Rev: 7 Quant Time: 001114 11:57
Output File: ^DS168::SS Injected at: **1114 11:32
Data File: >DS168::04 Dilution Factor: 1.00000
Name: vstd010 Instrument ID: 7002 D
Misc: 7002d

ID File: IDSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 001016 13:39 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.20	128.0	13809	50.00	UG	90
2)	Chloromethane	4.62	50.0	4901M	14.38	UG	90
3)	Bromomethane	5.49	94.0	1648M	8.84	UG	
4)	Vinyl Chloride	4.66	62.0	3749	10.05	UG	79
5)	Chloroethane	5.53	64.0	3233	12.51	UG	76
6)	Methylene Chloride	7.59	84.0	9186M	16.76	UG	50
8)	Acetone	6.63	43.0	4145M	16.05	UG	100
9)	Acrolein	8.24	56.0	1079	10.61	UG	95
11)	Trichlorofluoromethane	6.13	101.0	3702M	8.19	UG	
12)	Acetonitrile	8.14	41.0	1068	18.94	UG	81
13)	Carbon Disulfide	7.78	76.0	10147	7.18	UG	100
14)	1,1-Dichloroethene	7.05	96.0	2936M	9.27	UG	
15)	1,1-Dichloroethane	8.74	63.0	12625	9.06	UG	
16)	1,2-Dichloroethene-trans	8.10	96.0	4203	8.03	UG	90
17)	1,2-Dichloroethene-cis	9.70	61.0	13380	11.17	UG	64
18)	Chloroform	9.93	83.0	14564	10.18	UG	94
19)	1,2-Dichloroethane-d4	11.12	65.0	10190	9.77	UG	100
20)	1,2-Dichloroethane	11.26	62.0	12678	8.78	UG	99
21)	2-Butanone	9.29	43.0	8756	12.23	UG	73
22)	*1,4-Difluorobenzene	11.67	114.0	81313	50.00	UG	95
23)	1,1,1-Trichloroethane	10.62	97.0	11039	10.14	UG	89
24)	Carbon Tetrachloride	11.07	117.0	8281	9.88	UG	90
25)	Vinyl Acetate	8.60	43.0	7449	4.63	UG	76
26)	Bromodichloromethane	13.04	83.0	12302	10.62	UG	79
27)	1,2-Dichloropropane	12.63	63.0	11621	10.90	UG	98
28)	cis-1,3-Dichloropropene	13.96	75.0	12457	8.62	UG	87
29)	Trichloroethene	12.36	130.0	5622	8.69	UG	94
30)	Dibromochloromethane	16.25	129.0	5080	8.31	UG	94
31)	1,1,2-Trichloroethane	15.19	97.0	6922	11.23	UG	92
32)	Benzene	11.35	78.0	32895	9.95	UG	60
33)	trans-1,3-Dichloropropene	14.87	75.0	10819	8.48	UG	89
34)	2-Chloroethylvinylether	13.45	63.0	5674	10.14	UG	88
35)	Bromoform	19.36	173.0	2875	10.74	UG	96
36)	*Chlorobenzene-d5	17.39	117.0	75659	50.00	UG	94
37)	2-Hexanone	15.10	43.0	8649	10.22	UG	68
38)	4-Methyl-2-Pentanone	13.50	43.0	19186	9.97	UG	69
39)	Tetrachloroethene	15.83	164.0	5059	12.98	UG	77
40)	1,1,2,2-Tetrachloroethane	19.59	83.0	7536	9.21	UG	
41)	Toluene	14.60	91.0	30341	9.50	UG	98
42)	Toluene d-8	14.46	98.0	23814	10.12	UG	91

Operator ID: MANAGER
Output File: ^OS168::SS
Data File: >OS168::D4
Name: vstd0110
Misc: 7002d

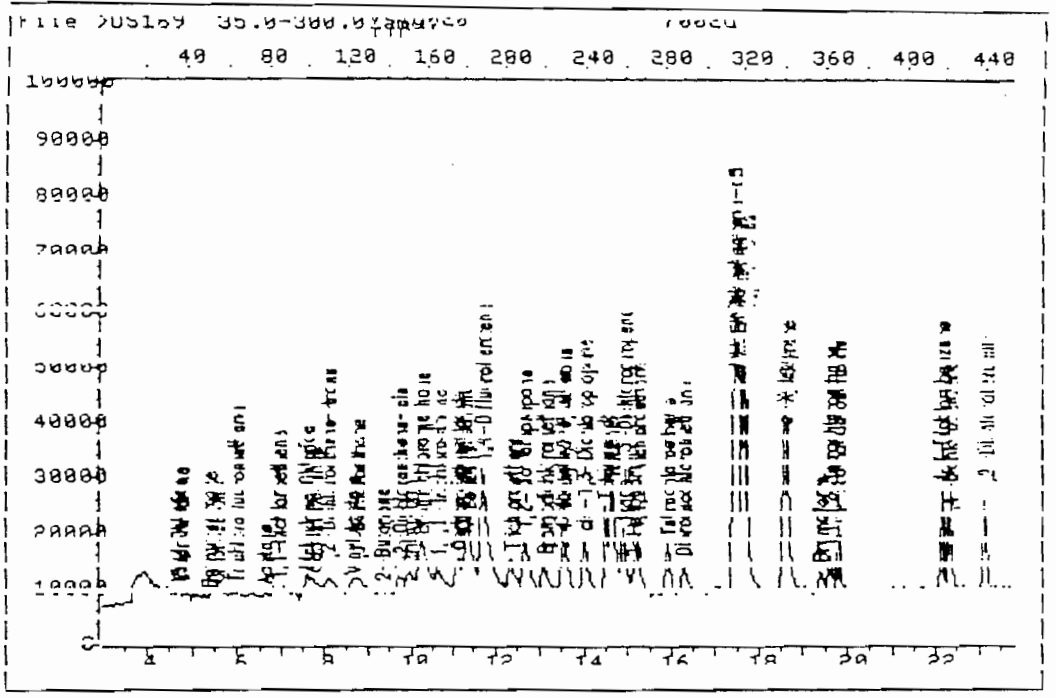
Quant Rev: 7 Quant Time: 001114 11:52
Injected at: **1114 11:52
Dilution Factor: 1.00000
Instrument ID: 7002 D

ID File: IDSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 001016 13:39 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
43)	Chlorobenzene	17.44	112.0	15288	8.98	UG	98
44)	Ethylbenzene	17.48	106.0	8499	10.15	UG	94
45)	Styrene	18.58	104.0	18632	9.71	UG	91
46)	m,p-Xylenes	17.67	106.0	22909M	19.52	UG	91
47)	o-Xylene	18.54	106.0	11305	10.10	UG	91
48)	Bromofluorobenzene	19.77	95.0	7553	9.93	UG	45
49)	1,3-Dichlorobenzene	22.11	146.0	8902	9.58	UG	82
50)	1,4-Dichlorobenzene	22.29	146.0	9203	10.18	UG	94
51)	1,2-Dichlorobenzene	23.11	146.0	8479	9.55	UG	87

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >DS169::D4 Quant Output File: ^DS169::SS
Name: vstd020 Instrument ID: 7002 D
Misc: 7002d

Id File: IOSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 001016 13:39 Last Qcal Time: <none>

Operator ID: MANAGER
Quant Time : 001114 12:26
Injected at: **1114 12:02

Operator ID: MANAGER
Output File: ^DS169::SS
Data File: >DS169::D4
Name: vstd020
Misc: 7002d

Quant Rev: 7 Quant Time: 001114 12:26
Injected at: **1114 12:02
Dilution Factor: 1.00000
Instrument ID: 7002 D

ID File: IDSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 001016 13:39 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.22	128.0	13481	50.00	UG	91
2)	Chloromethane	4.73	50.0	8402	25.25	UG	92
3)	Bromomethane	5.37	94.0	3890M	21.36	UG	80
4)	Vinyl Chloride	4.68	62.0	6550	17.99	UG	77
5)	Chloroethane	5.50	64.0	6132	24.31	UG	59
6)	Methylene Chloride	7.56	84.0	12362	23.10	UG	47
8)	Acetone	6.60	43.0	5244M	20.61	UG	100
11)	Trichlorofluoromethane	5.96	101.0	7892	17.89	UG	98
13)	Carbon Disulfide	7.75	76.0	16158	11.71	UG	100
14)	1,1-Dichloroethene	6.92	96.0	4089	13.22	UG	80
15)	1,1-Dichloroethane	8.75	63.0	21396	15.73	UG	88
16)	1,2-Dichloroethene-trans	8.07	96.0	7726	15.12	UG	84
17)	1,2-Dichloroethene-cis	9.71	61.0	22327	19.09	UG	66
18)	Chloroform	9.94	83.0	22798	16.33	UG	96
19)	1,2-Dichloroethane-d4	11.13	65.0	17873	17.56	UG	100
20)	1,2-Dichloroethane	11.27	62.0	20152	14.29	UG	97
21)	2-Butanone	9.30	43.0	12759	18.26	UG	77
22)	*1,4-Difluorobenzene	11.68	114.0	74482	50.00	UG	95
23)	1,1,1-Trichloroethane	10.63	97.0	18956	19.02	UG	85
24)	Carbon Tetrachloride	11.09	117.0	14077	18.33	UG	87
25)	Vinyl Acetate	8.62	43.0	31891	21.62	UG	80
26)	Bromodichloromethane	13.10	83.0	20412	19.23	UG	89
27)	1,2-Dichloropropane	12.64	63.0	17361	17.78	UG	95
28)	cis-1,3-Dichloropropene	13.97	75.0	25036	18.90	UG	83
29)	Trichloroethene	12.37	130.0	11220	18.94	UG	88
30)	Dibromochloromethane	16.26	129.0	9523	17.01	UG	98
31)	1,1,2-Trichloroethane	15.21	97.0	11029	19.53	UG	93
32)	Benzene	11.36	78.0	55205	18.22	UG	60
33)	trans-1,3-Dichloropropene	14.89	75.0	19715	16.87	UG	91
34)	2-Chloroethylvinylether	13.47	63.0	10474	20.44	UG	88
35)	Bromoform	19.37	173.0	5014	20.46	UG	91
36)	*Chlorobenzene-d5	17.40	117.0	69365	50.00	UG	93
37)	2-Hexanone	15.12	43.0	17418	22.45	UG	71
38)	4-Methyl-2-Pentanone	13.51	43.0	35806	20.30	UG	74
39)	Tetrachloroethene	15.89	164.0	6435	19.01	UG	91
40)	1,1,2,2-Tetrachloroethane	19.60	83.0	14711	19.61	UG	98
41)	Toluene	14.61	91.0	51037	17.42	UG	9[illegible]
42)	Toluene d-8	14.47	98.0	40999	19.00	UG	9[illegible]
43)	Chlorobenzene	17.45	112.0	29046	18.61	UG	9[illegible]
44)	Ethylbenzene	17.50	106.0	14386	18.74	UG	9

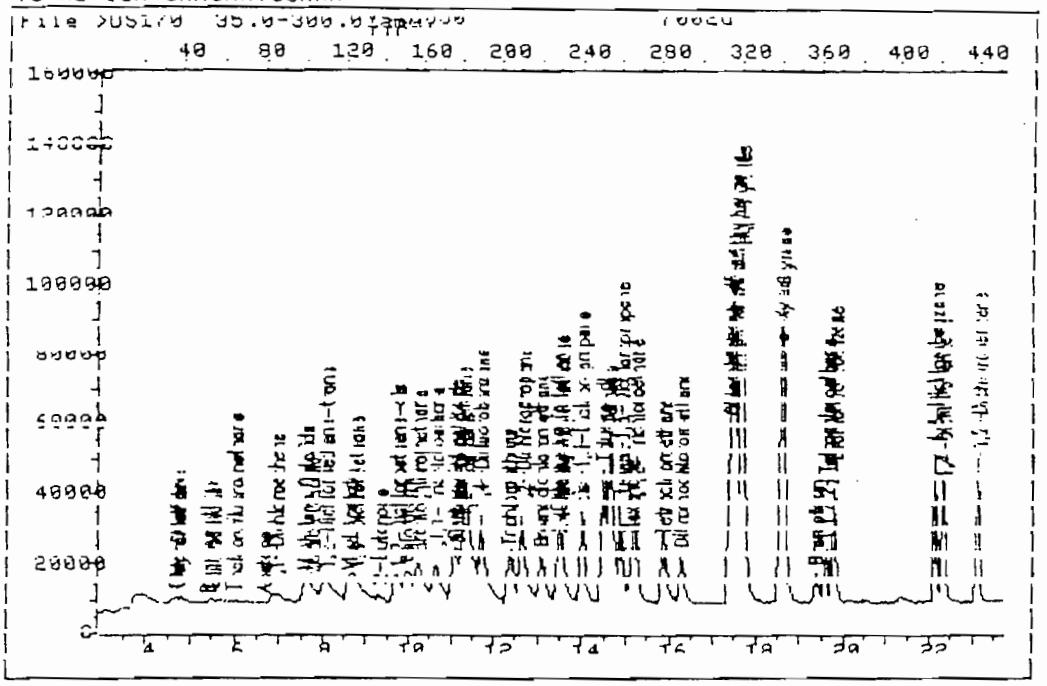
Operator ID: MANAGER Quant Rev: 7 Quant Time: 001114 12:26
Output File: >DS169::SS Injected at: **1114 12:02
Data File: >DS169::D4 Dilution Factor: 1.00000
Name: vstd020 Instrument ID: 7002 D
Misc: 7002d

ID File: IDSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 001016 13:39 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
45)	Styrene	18.59	104.0	33435	19.00	UG	91
46)	m,p-Xylenes	17.68	106.0	39444M	36.65	UG	91
47)	o-Xylene	18.55	106.0	21376	20.84	UG	92
48)	Bromofluorobenzene	19.78	95.0	13830	19.83	UG	47
49)	1,3-Dichlorobenzene	22.12	146.0	16027	18.81	UG	86
50)	1,4-Dichlorobenzene	22.30	146.0	16084	19.40	UG	96
51)	1,2-Dichlorobenzene	23.13	146.0	15595	19.17	UG	87

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >DS170::D4 Quant Output File: ^DS170::SS
Name: vstd050 Instrument ID: 7002 D
Misc: 7002d

Id File: IDSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 001016 13:39 Last Qcal Time: <none>

Operator ID: MANAGER
Quant Time : 001114 12:56
Injected at: **1114 12:31

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 001114 12:56
Output File: ^DS170::SS Injected at: **1114 12:31
Data File: >DS170::D4 Dilution Factor: 1.00000
Name: vstd050 Instrument ID: 7002 D
Misc: 7002d

ID File: IDSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 001016 13:39 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.21	128.0	10959	50.00	UG	95
2)	Chloromethane	4.72	50.0	18317	67.72	UG	89
3)	Bromomethane	5.40	94.0	7193M	48.60	UG	69
4)	Vinyl Chloride	4.72	62.0	17372	58.70	UG	91
5)	Chloroethane	5.49	64.0	10084M	48.80	UG	74
6)	Methylene Chloride	7.60	84.0	25294	58.13	UG	49
8)	Acetone	6.64	43.0	11578	55.96	UG	100
11)	Trichlorofluoromethane	6.00	101.0	16454	45.88	UG	77
13)	Carbon Disulfide	7.74	76.0	37818	33.71	UG	100
14)	1,1-Dichloroethene	6.91	96.0	10948	43.54	UG	
15)	1,1-Dichloroethane	8.75	63.0	52643	47.60	UG	
16)	1,2-Dichloroethene-trans	8.06	96.0	23429	56.40	UG	
17)	1,2-Dichloroethene-cis	9.71	61.0	47567	50.03	UG	72
18)	Chloroform	9.94	83.0	55020	48.48	UG	98
19)	1,2-Dichloroethane-d4	11.13	65.0	40908	49.43	UG	100
20)	1,2-Dichloroethane	11.26	62.0	50367	43.95	UG	93
21)	2-Butanone	9.29	43.0	32341	56.94	UG	78
22)	*1,4-Difluorobenzene	11.68	114.0	76432	50.00	UG	94
23)	1,1,1-Trichloroethane	10.62	97.0	43141	42.17	UG	89
24)	Carbon Tetrachloride	11.08	117.0	31659	40.17	UG	95
25)	Vinyl Acetate	8.61	43.0	77909	51.47	UG	81
26)	Bromodichloromethane	13.05	83.0	47574	43.67	UG	90
27)	1,2-Dichloropropane	12.64	63.0	42672	42.59	UG	95
28)	cis-1,3-Dichloropropene	13.96	75.0	58241	42.85	UG	81
29)	Trichloroethene	12.32	130.0	23449	38.57	UG	96
30)	Dibromochloromethane	16.25	129.0	23657	41.19	UG	98
31)	1,1,2-Trichloroethane	15.20	97.0	24207	41.77	UG	97
32)	Benzene	11.36	78.0	131948	42.45	UG	58
33)	trans-1,3-Dichloropropene	14.88	75.0	48934	40.81	UG	92
34)	2-Chloroethylvinylether	13.46	63.0	25777	49.03	UG	94
35)	Bromoform	19.37	173.0	11305	44.95	UG	94
36)	*Chlorobenzene-d5	17.40	117.0	70785	50.00	UG	94
37)	2-Hexanone	15.11	43.0	38607	48.76	UG	70
38)	4-Methyl-2-Pentanone	13.51	43.0	87854	48.82	UG	71
39)	Tetrachloroethene	15.84	164.0	16560	44.86	UG	60
40)	1,1,2,2-Tetrachloroethane	19.60	83.0	31765	41.50	UG	
41)	Toluene	14.61	91.0	126251	42.23	UG	
42)	Toluene d-8	14.47	98.0	98805	44.88	UG	91
43)	Chlorobenzene	17.44	112.0	65035	40.82	UG	99
44)	Ethylbenzene	17.49	106.0	35284	45.04	UG	90

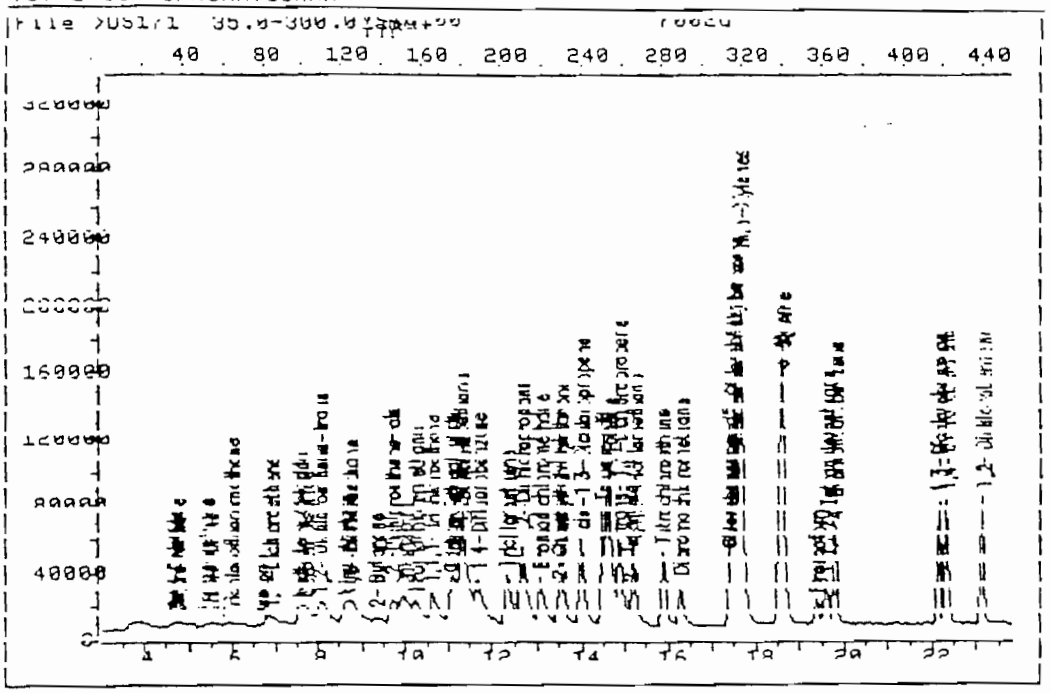
Operator ID: MANAGER Quant Rev: 7 Quant Time: 001114 12:56
Output File: >DS170::SS Injected at: **1114 12:51
Data File: >DS170::D4 Dilution Factor: 1.00000
Name: vstd050 Instrument ID: 7002 D
Misc: 7002d

ID File: IDSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 001016 13:39 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
45)	Styrene	18.59	104.0	78496	43.72	UG	92
46)	m,p-Xylenes	17.63	106.0	91082M	82.94	UG	93
47)	o-Xylene	18.54	106.0	45516	43.48	UG	88
48)	Bromofluorobenzene	19.78	95.0	33071	46.48	UG	42
49)	1,3-Dichlorobenzene	22.11	146.0	35595	40.94	UG	79
50)	1,4-Dichlorobenzene	22.30	146.0	37602	44.45	UG	92
51)	1,2-Dichlorobenzene	23.12	146.0	33061	39.82	UG	84

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >DS171::04 Quant Output File: ^DS171::SS
Name: vstd100 Instrument ID: 7002 D
Misc: 7002d

Id File: IDSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 001016 13:39 Last Qcal Time: <none>

Operator ID: MANAGER
Quant Time : 001114 13:25
Injected at: **1114 13:01

Operator ID: MANAGER
Output File: ^DS171::SS
Data File: >DS171::D4
Name: vstd100
Misc: 7002d

Quant Rev: 7 Quant Time: 001114 13:25
Injected at: **1114 13:01
Dilution Factor: 1.000000
Instrument ID: 7002 D

ID File: IDSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 001016 13:39 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.23	128.0	11680	50.00	UG	91
2)	Chloromethane	4.73	50.0	24043	83.41	UG	79
3)	Bromomethane	5.37	94.0	15147	96.02	UG	89
4)	Vinyl Chloride	4.69	62.0	23502	74.51	UG	90
5)	Chloroethane	5.46	64.0	20126	92.11	UG	76
6)	Methylene Chloride	7.57	84.0	46429	100.12	UG	47
8)	Acetone	6.66	43.0	21064	95.53	UG	100
11)	Trichlorofluoromethane	5.97	101.0	30929	80.92	UG	74
13)	Carbon Disulfide	7.71	76.0	71806	60.05	UG	100
14)	1,1-Dichloroethene	6.88	96.0	21270	79.38	UG	68
15)	1,1-Dichloroethane	8.72	63.0	100492	85.26	UG	94
16)	1,2-Dichloroethene-trans	8.03	96.0	36715	82.93	UG	83
17)	1,2-Dichloroethene-cis	9.68	61.0	92200	91.00	UG	70
18)	Chloroform	9.95	83.0	98326	81.29	UG	99
19)	1,2-Dichloroethane-d4	11.10	65.0	76605	86.85	UG	100
20)	1,2-Dichloroethane	11.28	62.0	107704	88.17	UG	95
21)	2-Butanone	9.31	43.0	60094	99.27	UG	77
22)	*1,4-Difluorobenzene	11.69	114.0	72598	50.00	UG	94
23)	1,1,1-Trichloroethane	10.59	97.0	80110	82.45	UG	90
24)	Carbon Tetrachloride	11.05	117.0	64259	85.84	UG	97
25)	Vinyl Acetate	8.62	43.0	149310	103.85	UG	78
26)	Bromodichloromethane	13.06	83.0	85503	82.64	UG	88
27)	1,2-Dichloropropane	12.65	63.0	81120	85.25	UG	93
28)	cis-1,3-Dichloropropene	13.98	75.0	109085	84.50	UG	82
29)	Trichloroethene	12.33	130.0	41716	72.25	UG	87
30)	Dibromochloromethane	16.27	129.0	42278	77.49	UG	97
31)	1,1,2-Trichloroethane	15.22	97.0	47358	86.03	UG	94
32)	Benzene	11.32	78.0	241815	81.90	UG	57
33)	trans-1,3-Dichloropropene	14.85	75.0	95218	83.61	UG	93
34)	2-Chloroethylvinylether	13.48	63.0	24728	49.52	UG	89
35)	Bromoform	19.38	173.0	18642	78.03	UG	98
36)	*Chlorobenzene-d5	17.37	117.0	64985	50.00	UG	91
37)	2-Hexanone	15.12	43.0	64501	88.74	UG	68
38)	4-Methyl-2-Pentanone	13.52	43.0	132548	80.22	UG	75
39)	Tetrachloroethene	15.86	164.0	29319	87.57	UG	90
40)	1,1,2,2-Tetrachloroethane	19.61	83.0	56406	80.26	UG	98
41)	Toluene	14.62	91.0	236429	86.14	UG	95
42)	Toluene d-8	14.48	98.0	182317	90.20	UG	97
43)	Chlorobenzene	17.46	112.0	116462	79.63	UG	99
44)	Ethylbenzene	17.50	106.0	55108	76.62	UG	91

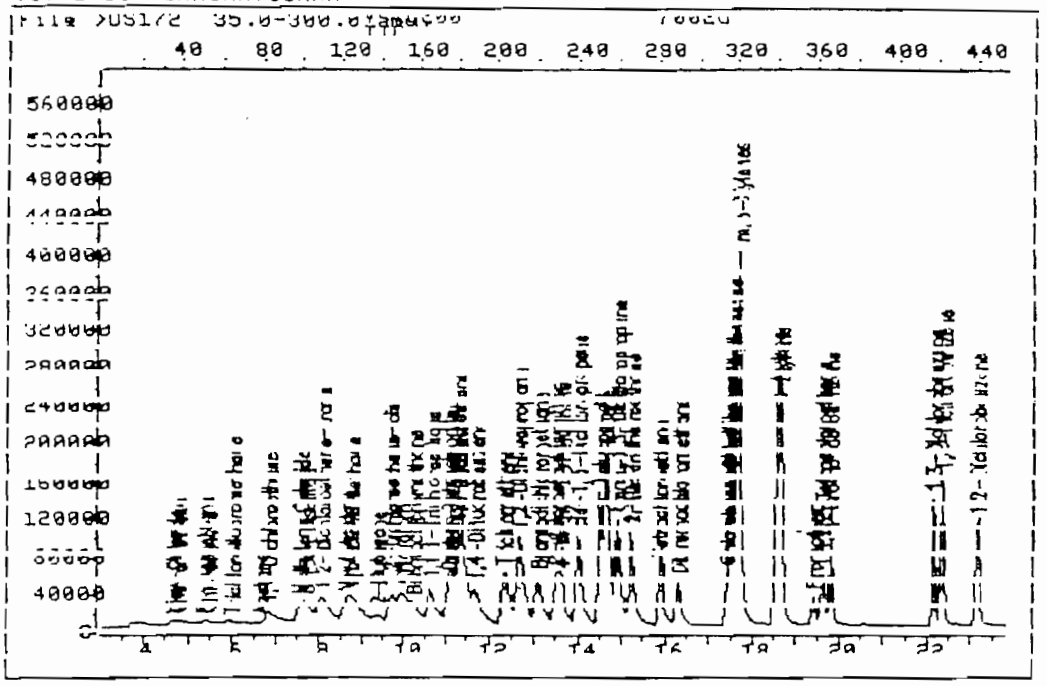
Operator ID: MANAGER Quant Rev: 7 Quant Time: 001114 13:25
Output File: ^DS171::SS Injected at: **1114 13:11
Data File: >DS171::D4 Dilution Factor: 1.00000
Name: vstd100 Instrument ID: 7002 D
Misc: 7002d

ID File: IDSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 001016 13:39 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
45)	Styrene	18.60	104.0	145720	88.41	UG	95
46)	m,p-Xylenes	17.64	106.0	171550M	170.15	UG	90
47)	o-Xylene	18.56	106.0	85422	88.88	UG	85
48)	Bromofluorobenzene	19.79	95.0	61804	94.61	UG	98
49)	1,3-Dichlorobenzene	22.13	146.0	62436	78.22	UG	71
50)	1,4-Dichlorobenzene	22.31	146.0	62917	81.02	UG	83
51)	1,2-Dichlorobenzene	23.14	146.0	56922	74.68	UG	77

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >DS172::D4 Quant Output File: ^DS172::SS
Name: vstd200 Instrument ID: 7002 D
Misc: 7002d

Id File: IDSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 001016 13:39 Last Qcal Time: <none>

Operator ID: MANAGER
Quant Time : 001114 13:55
Injected at: **1114 13:30

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 001114 13:55
Output File: ^DS172::SS Injected at: **1114 13:30
Data File: >DS172::D4 Dilution Factor: 1.00000
Name: vstd200 Instrument ID: 7002 D
Misc: 7002d

ID File: IDSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 001016 13:39 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.22	128.0	12991	50.00	UG	93
2)	Chloromethane	4.77	50.0	45225	141.06	UG	82
3)	Bromomethane	5.37	94.0	22747M	129.64	UG	96
4)	Vinyl Chloride	4.68	62.0	56728	161.70	UG	92
5)	Chloroethane	5.46	64.0	27030	111.22	UG	91
6)	Methylene Chloride	7.57	84.0	82242	159.45	UG	45
8)	Acetone	6.65	43.0	52248	213.04	UG	100
11)	Trichlorofluoromethane	6.01	101.0	52542	123.59	UG	86
13)	Carbon Disulfide	7.70	76.0	137904	103.69	UG	100
14)	1,1-Dichloroethene	6.83	96.0	40616	136.28	UG	
15)	1,1-Dichloroethane	8.76	63.0	202342	154.35	UG	
16)	1,2-Dichloroethene-trans	8.07	96.0	73658	149.59	UG	2
17)	1,2-Dichloroethene-cis	9.67	61.0	187349	166.24	UG	69
18)	Chloroform	9.95	83.0	201015	149.42	UG	96
19)	1,2-Dichloroethane-d4	11.14	65.0	157413	160.45	UG	100
20)	1,2-Dichloroethane	11.27	62.0	211295	155.52	UG	92
21)	2-Butanone	9.35	43.0	131610	195.48	UG	76
22)	*1,4-Difluorobenzene	11.69	114.0	73678	50.00	UG	96
23)	1,1,1-Trichloroethane	10.63	97.0	163809	166.12	UG	92
24)	Carbon Tetrachloride	11.05	117.0	126989	167.15	UG	97
25)	Vinyl Acetate	8.62	43.0	301191	206.41	UG	79
26)	Bromodichloromethane	13.11	83.0	173436	165.17	UG	89
27)	1,2-Dichloropropane	12.65	63.0	163260	169.05	UG	93
28)	cis-1,3-Dichloropropene	13.98	75.0	219939	167.87	UG	82
29)	Trichloroethene	12.33	130.0	84307	143.87	UG	92
30)	Dibromochloromethane	16.31	129.0	80642	145.64	UG	97
31)	1,1,2-Trichloroethane	15.21	97.0	90193	161.44	UG	93
32)	Benzene	11.32	78.0	480602	160.38	UG	57
33)	trans-1,3-Dichloropropene	14.89	75.0	194022	167.87	UG	91
34)	2-Chloroethylvinylether	13.47	63.0	96625	190.65	UG	94
35)	Bromoform	19.42	173.0	35872	147.95	UG	97
36)	*Chlorobenzene-d5	17.41	117.0	63968	50.00	UG	93
37)	2-Hexanone	15.21	43.0	137341	191.95	UG	68
38)	4-Methyl-2-Pentanone	13.61	43.0	315377	193.91	UG	74
39)	Tetrachloroethene	15.85	164.0	55071	167.09	UG	97
40)	1,1,2,2-Tetrachloroethane	19.61	83.0	109842	158.79	UG	
41)	Toluene	14.62	91.0	461991	171.00	UG	7
42)	Toluene d-8	14.48	98.0	362831	182.36	UG	91
43)	Chlorobenzene	17.45	112.0	218348	151.67	UG	99
44)	Ethylbenzene	17.55	106.0	113004	159.61	UG	86

Operator ID: MANAGER Quant Rev: 7 Quant Time: 001114 13:55
Output File: ^DS172::SS Injected at: **1114 13:30
Data File: >DS172::D4 Dilution Factor: 1.00000
Name: vstd200 Instrument ID: 7002 D
Misc: 7002d

ID File: IDSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 001016 13:39 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
45)	Styrene	18.64	104.0	276030	170.13	UG	97
46)	m,p-Xylenes	17.68	106.0	304144M	306.46	UG	88
47)	o-Xylene	18.55	106.0	155534	164.40	UG	89
48)	Bromofluorobenzene	19.79	95.0	117152	182.19	UG	92
49)	1,3-Dichlorobenzene	22.12	146.0	120146	152.92	UG	84
50)	1,4-Dichlorobenzene	22.35	146.0	120344	157.43	UG	94
51)	1,2-Dichlorobenzene	23.13	146.0	109125	145.44	UG	90

* Compound is ISTD

7A

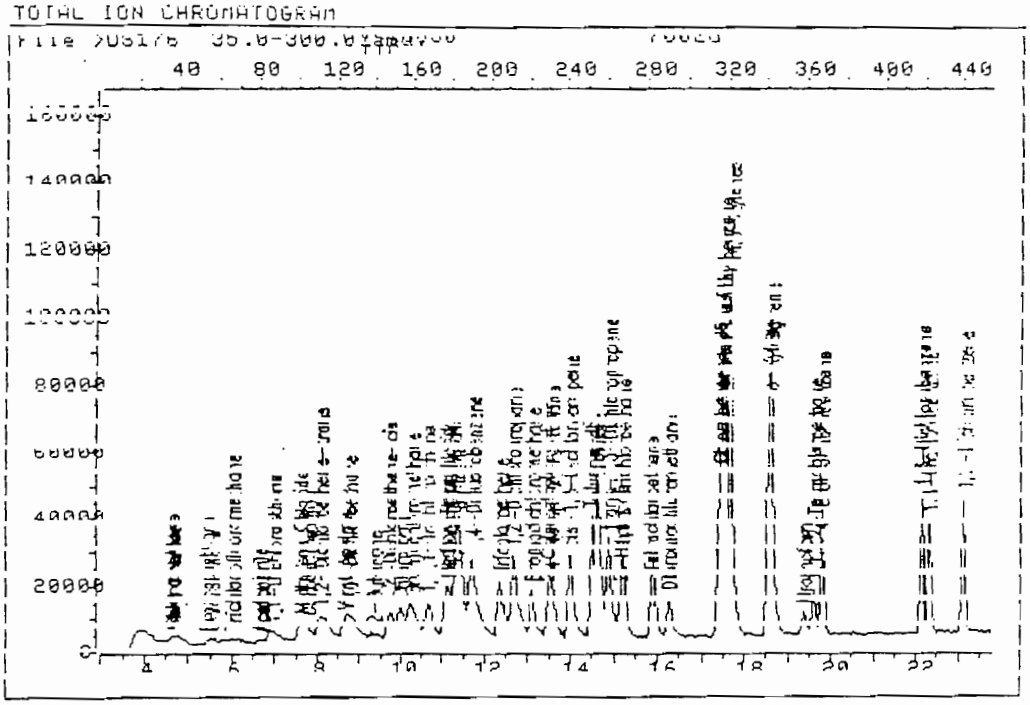
VOLATILE CONTINUING CALIBRATION CHECK

) Name: AES, Inc. Contract:
) Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
,trument ID: H5970 D Calibration Date: 11/20/00 Time: 12:22
) File ID: DS176 Init. Calib. Date(s): 11/14/00 11/14/00
ıted Purge: (Y/N) N Init. Calib. Times: 11:32 13:30
Column: RTX502.2 ID: .32 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chloromethane	1.381	1.474		-6.7	
Bromomethane	.612	.667	.100	-9.0	25.0
Vinyl Chloride	1.251	1.279	.100	-2.2	25.0
Chloroethane	.920	.919		.1	
Methylene Chloride	2.299	2.109		8.3	
Acetone	1.090	1.312		-20.4	
Carbon Disulfide	3.170	2.801		11.6	
1,1-Dichloroethene	.903	1.022	.100	-13.2	25.0
1,1-Dichloroethane	4.308	5.034	.200	-16.9	25.0
1,2-Dichloroethene-trans	1.616	1.726		-6.8	
Chloroform	4.520	4.743	.200	-4.9	25.0
1,2-Dichloroethane	4.320	4.578	.100	-6.0	25.0
2-Butanone	2.719	2.671		1.8	
1,1,1-Trichloroethane	.597	.599	.100	-.3	25.0
Carbon Tetrachloride	.454	.475	.100	-4.6	25.0
Bromodichloromethane	.648	.631	.200	2.6	25.0
1,2-Dichloropropane	.594	.581		2.2	
cis-1,3-Dichloropropene	.773	.812	.200	-5.0	25.0
Trichloroethene	.320	.321	.300	-.3	25.0
Dibromochloromethane	.301	.292	.100	3.0	25.0
1,1,2-Trichloroethane	.349	.333	.100	4.6	25.0
Benzene	1.780	1.828	.500	-2.7	25.0
trans-1,3-Dichloropropene	.656	.691	.100	-5.3	25.0
Bromoform	.149	.127	.100	14.8	25.0
4-Methyl-2-Pentanone	1.210	1.198		1.0	
2-Hexanone	.556	.473		14.9	
Tetrachloroethene	.248	.241	.200	2.8	25.0
1,1,2,2-Tetrachloroethane	.468	.392	.500	16.2	25.0
Toluene	1.851	1.926	.400	-4.1	25.0
Chlorobenzene	.945	1.013	.500	-7.2	25.0
Ethylbenzene	.489	.530	.100	-8.4	25.0
Styrene	1.149	1.193	.300	-3.8	25.0
Toluene d-8	1.454	1.409		3.1	
Bromofluorobenzene	.480	.464	.200	3.3	25.0
1,2-Dichloroethane-d4	3.409	3.518		-3.2	
1,2-Dichloroethene-cis	4.176	4.402		-5.4	
m,p-Xylenes	.673	.691		-2.7	
o-Xylene	.685	.688	.010	-.4	25.0

All other compounds must meet a minimum RRF of .010.

TOTAL ION CHROMATOGRAM



Data File: >DS176::D4 Quant Output File: ^DS176::D3
Name: vstd050 Instrument ID: 7002 D
Misc: 7002d

Id File: IDSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 001016 13:39 Last Qcal Time: <none>

Operator ID: MANAGER
Quant Time : 001120 12:47
Injected at: **1120 12:22

Operator ID: MANAGER Quant Rev: 7 Quant Time: 001120 12:47
Output File: ^DS176::03 Injected at: **1120 12:22
Data File: >DS176::04 Dilution Factor: 1.00000
Name: vstd050 Instrument ID: 7002 D
Misc: 7002d

ID File: IDSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 001016 13:39 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.26	128.0	11337	50.00	UG	95
2)	Chloromethane	4.64	50.0	16707M	59.71	UG	81
3)	Bromomethane	5.41	94.0	7561M	49.38	UG	84
4)	Vinyl Chloride	4.68	62.0	14498M	47.35	UG	91
5)	Chloroethane	5.55	64.0	10421M	49.13	UG	86
6)	Methylene Chloride	7.60	84.0	23909	53.12	UG	49
8)	Acetone	6.69	43.0	14879M	69.52	UG	100
11)	Trichlorofluoromethane	6.01	101.0	18511	49.89	UG	94
12)	Acetonitrile	6.65	41.0	1010	21.82	UG	33
13)	Carbon Disulfide	7.79	76.0	31750	27.35	UG	1
14)	1,1-Dichloroethene	6.97	96.0	11582	44.53	UG	
15)	1,1-Dichloroethane	8.75	63.0	57069	49.88	UG	4
16)	1,2-Dichloroethene-trans	8.06	96.0	19568	45.54	UG	84
17)	1,2-Dichloroethene-cis	9.71	61.0	49906	50.74	UG	69
18)	Chloroform	9.98	83.0	53776	45.80	UG	99
19)	1,2-Dichloroethane-d4	11.12	65.0	39882	46.58	UG	100
20)	1,2-Dichloroethane	11.26	62.0	51899	43.77	UG	94
21)	2-Butanone	9.34	43.0	30283	51.54	UG	78
22)	*1,4-Difluorobenzene	11.72	114.0	73240	50.00	UG	97
23)	1,1,1-Trichloroethane	10.62	97.0	43902	44.79	UG	89
24)	Carbon Tetrachloride	11.08	117.0	34817	46.10	UG	90
25)	Vinyl Acetate	8.66	43.0	71830	49.52	UG	79
26)	Bromodichloromethane	13.09	83.0	46219	44.28	UG	88
27)	1,2-Dichloropropane	12.64	63.0	42571	44.34	UG	96
28)	cis-1,3-Dichloropropene	13.96	75.0	59487	45.68	UG	83
29)	Trichloroethene	12.36	130.0	23510	40.36	UG	94
30)	Dibromochloromethane	16.25	129.0	21356	38.80	UG	97
31)	1,1,2-Trichloroethane	15.20	97.0	24387	43.91	UG	91
32)	Benzene	11.35	78.0	133901	44.95	UG	98
33)	trans-1,3-Dichloropropene	14.88	75.0	50635	44.07	UG	91
34)	2-Chloroethylvinylether	13.46	63.0	23732	47.10	UG	91
35)	Bromoform	19.37	173.0	9275	38.48	UG	99
36)	*Chlorobenzene-d5	17.40	117.0	65967	50.00	UG	92
37)	2-Hexanone	15.15	43.0	31200	42.28	UG	69
38)	4-Methyl-2-Pentanone	13.55	43.0	79030	47.12	UG	
39)	Tetrachloroethene	15.84	164.0	15903	46.79	UG	
40)	1,1,2,2-Tetrachloroethane	19.60	83.0	25880	36.28	UG	
41)	Toluene	14.60	91.0	127024	45.59	UG	95
42)	Toluene d-8	14.47	98.0	92962	45.31	UG	97
43)	Chlorobenzene	17.44	112.0	66818	45.01	UG	97

Operator ID: MANAGER Quant Rev: 7 Quant Time: 001120 12:47
Output File: ^DS176::D3 Injected at: **1120 12:42
Data File: >DS176::D4 Dilution Factor: 1.00000
Name: vstd050 Instrument ID: 7002 D
Misc: 7002d

ID File: IDSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 001016 13:39 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	Ethylbenzene	17.49	106.0	34991	47.92	UG	90
45)	Styrene	18.59	104.0	78668	47.02	UG	92
46)	m,p-Xylenes	17.67	106.0	91143M	89.05	UG	91
47)	o-Xylene	18.54	106.0	45384	46.52	UG	91
48)	Bromofluorobenzene	19.78	95.0	30619	46.17	UG	43
49)	1,3-Dichlorobenzene	22.12	146.0	34570	42.67	UG	79
50)	1,4-Dichlorobenzene	22.30	146.0	34969	44.36	UG	91
51)	1,2-Dichlorobenzene	23.13	146.0	31254	40.39	UG	83

* Compound is ISTD

7A

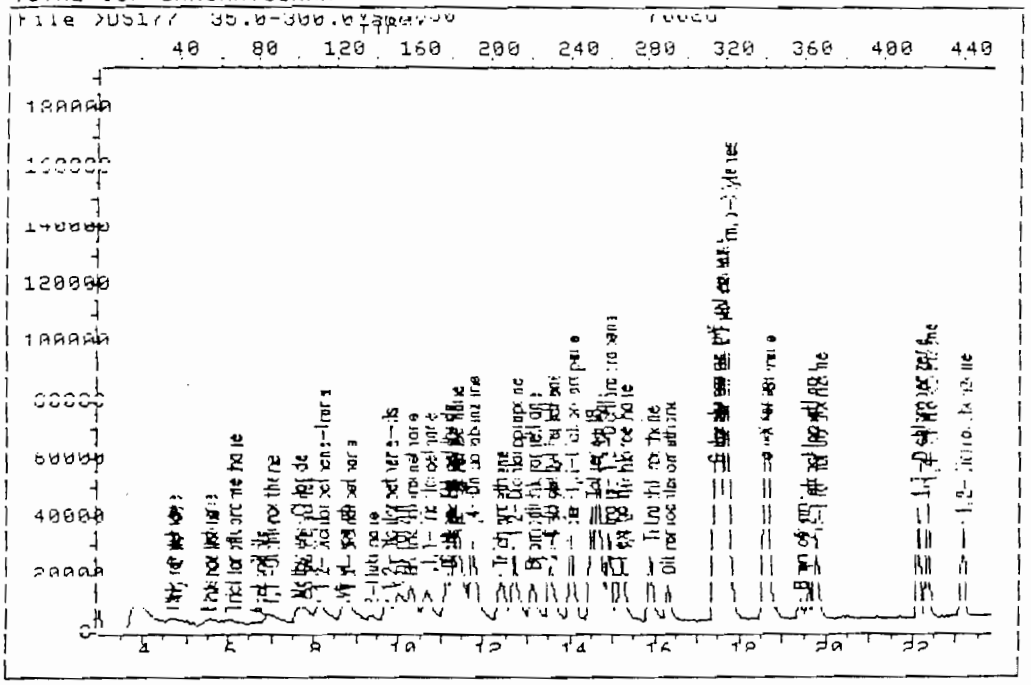
VOLATILE CONTINUING CALIBRATION CHECK

Name: AES, Inc. Contract:
Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
trument ID: H5970 D Calibration Date: 11/21/00 Time: 11:47
File ID: DS177 Init. Calib. Date(s): 11/14/00 11/14/00
ted Purge: (Y/N) N Init. Calib. Times: 11:32 13:30
Column: RTX502.2 ID: .32 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chloromethane	1.381	1.643		-19.0	
Bromomethane	.612	.594	.100	2.9	25.0
Vinyl Chloride	1.251	1.200	.100	4.1	25.0
Chloroethane	.920	.847		7.9	
Methylene Chloride	2.299	1.918		16.6	
Acetone	1.090	1.227		-12.6	
Carbon Disulfide	3.170	2.535		20.0	
1,1-Dichloroethene	.903	.951	.100	-5.3	25.0
1,1-Dichloroethane	4.308	4.619	.200	-7.2	25.0
1,2-Dichloroethene-trans	1.616	1.639		-1.4	
Chloroform	4.520	4.752	.200	-5.1	25.0
1,2-Dichloroethane	4.320	4.027	.100	6.8	25.0
2-Butanone	2.719	2.703		.6	
1,1,1-Trichloroethane	.597	.548	.100	8.2	25.0
Carbon Tetrachloride	.454	.433	.100	4.6	25.0
Bromodichloromethane	.648	.592	.200	8.6	25.0
1,2-Dichloropropane	.594	.538		9.4	
cis-1,3-Dichloropropene	.773	.740	.200	4.3	25.0
Trichloroethene	.320	.297	.300	7.2	25.0
Dibromochloromethane	.301	.272	.100	9.6	25.0
1,1,2-Trichloroethane	.349	.299	.100	14.3	25.0
Benzene	1.780	1.684	.500	5.4	25.0
trans-1,3-Dichloropropene	.656	.637	.100	2.9	25.0
Bromoform	.149	.113	.100	24.2	25.0
4-Methyl-2-Pentanone	1.210	1.050		13.2	
2-Hexanone	.556	.330		40.6	
Tetrachloroethene	.248	.218	.200	12.1	25.0
1,1,2,2-Tetrachloroethane	.468	.368	.500	21.4	25.0
Toluene	1.851	1.751	.400	5.4	25.0
Chlorobenzene	.945	.927	.500	1.9	25.0
Ethylbenzene	.489	.429	.100	12.3	25.0
Styrene	1.149	1.060	.300	7.7	25.0
Toluene d-8	1.454	1.439		1.0	
Bromofluorobenzene	.480	.485	.200	-1.0	25.0
1,2-Dichloroethane-d4	3.409	3.605		-5.7	
1,2-Dichloroethene-cis	4.176	4.129		1.1	
m,p-Xylenes	.673	.651		3.3	
o-Xylene	.685	.635	.010	7.3	25.0

All other compounds must meet a minimum RRF of .010.

TOTAL ION CHROMATOGRAM



Data File: >DS177::D4 Quant Output File: ^DS177::D3
Name: vstd050 Instrument ID: 7002 D
Misc: 7002d

Id File: IDSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 001016 13:39 Last Qcal Time: <none>

Operator ID: MANAGER
Quant Time : 001121 12:12
Injected at: **1121 11:47

Operator ID: MANAGER Quant Rev: 7 Quant Time: 001121 12:12
Output File: ^DS177::D3 Injected at: **1121 11:47
Data File: >DS177::D4 Dilution Factor: 1.00000
Name: vstd050 Instrument ID: 7002 D
Misc: 7002d

ID File: IDSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 001016 13:39 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.26	128.0	12396	50.00	UG	98
2)	Chloromethane	4.69	50.0	20364M	66.56	UG	85
3)	Bromomethane	5.51	94.0	7369M	44.01	UG	91
4)	Vinyl Chloride	4.73	62.0	14871M	44.42	UG	88
5)	Chloroethane	5.55	64.0	10494M	45.25	UG	87
6)	Methylene Chloride	7.61	84.0	23773	48.30	UG	47
8)	Acetone	6.70	43.0	15211M	65.00	UG	100
11)	Trichlorofluoromethane	6.10	101.0	18881	46.54	UG	91
12)	Acetonitrile	6.70	41.0	1145	22.62	UG	81
13)	Carbon Disulfide	7.79	76.0	31425	24.76	UG	100
14)	1,1-Dichloroethene	6.97	96.0	11784	41.44	UG	
15)	1,1-Dichloroethane	8.80	63.0	57258	45.77	UG	
16)	1,2-Dichloroethene-trans	8.16	96.0	20320	43.25	UG	84
17)	1,2-Dichloroethene-cis	9.76	61.0	51180	47.59	UG	67
18)	Chloroform	9.99	83.0	58907	45.89	UG	94
19)	1,2-Dichloroethane-d4	11.17	65.0	44691	47.74	UG	100
20)	1,2-Dichloroethane	11.31	62.0	49918	38.50	UG	95
21)	2-Butanone	9.35	43.0	33504	52.15	UG	79
22)	*1,4-Difluorobenzene	11.72	114.0	80860	50.00	UG	93
23)	1,1,1-Trichloroethane	10.67	97.0	44296	40.93	UG	91
24)	Carbon Tetrachloride	11.13	117.0	34985	41.96	UG	93
25)	Vinyl Acetate	8.66	43.0	67851	42.37	UG	79
26)	Bromodichloromethane	13.10	83.0	47843	41.52	UG	89
27)	1,2-Dichloropropane	12.68	63.0	43489	41.03	UG	92
28)	cis-1,3-Dichloropropene	14.01	75.0	59876	41.64	UG	80
29)	Trichloroethene	12.36	130.0	23998	37.32	UG	87
30)	Dibromochloromethane	16.30	129.0	22020	36.24	UG	99
31)	1,1,2-Trichloroethane	15.25	97.0	24158	39.40	UG	90
32)	Benzene	11.36	78.0	136144	41.40	UG	98
33)	trans-1,3-Dichloropropene	14.88	75.0	51535	40.63	UG	92
34)	2-Chloroethylvinylether	13.51	63.0	25523	45.89	UG	94
35)	Bromoform	19.42	173.0	9163	34.43	UG	99
36)	*Chlorobenzene-d5	17.40	117.0	73848	50.00	UG	93
37)	2-Hexanone	15.16	43.0	24393	29.53	UG	66
38)	4-Methyl-2-Pentanone	13.55	43.0	77576	41.32	UG	72
39)	Tetrachloroethene	15.89	164.0	16132	42.40	UG	
40)	1,1,2,2-Tetrachloroethane	19.60	83.0	27175	34.03	UG	
41)	Toluene	14.65	91.0	129273	41.45	UG	97
42)	Toluene d-8	14.52	98.0	106236	46.25	UG	95
43)	Chlorobenzene	17.49	112.0	68485	41.21	UG	99

Operator ID: MANAGER Quant Rev: 7 Quant Time: 001121 12:12
Output File: ^DS177::D3 Injected at: **1121 11:47
Data File: >DS177::D4 Dilution Factor: 1.00000
Name: vstd050 Instrument ID: 7002 D
Misc: 7002d

ID File: IDSC91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 001016 13:39 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	Ethylbenzene	17.54	106.0	31651	38.72	UG	88
45)	Styrene	18.64	104.0	78298	41.80	UG	99
46)	m,p-Xylenes	17.68	106.0	96133M	83.90	UG	92
47)	o-Xylene	18.55	106.0	46920	42.96	UG	94
48)	Bromofluorobenzene	19.83	95.0	35789	48.21	UG	33
49)	1,3-Dichlorobenzene	22.12	146.0	35609	39.26	UG	87
50)	1,4-Dichlorobenzene	22.35	146.0	35654	40.40	UG	76
51)	1,2-Dichlorobenzene	23.13	146.0	32158	36.99	UG	92

* Compound is ISTD

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

b Name: AES, Inc. Contract:
Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
File ID (Standard): DS176 Date Analyzed: 11/20/00
strument ID: H5970 D Time Analyzed: 12:22
Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

	IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
12 HOUR STD	11337.	10.26	73240.	11.72	65967.	17.40
UPPER LIMIT	22674.	10.76	146480.	12.22	131934.	17.90
LOWER LIMIT	5669.	9.76	36620.	11.22	32984.	16.90
EPA SAMPLE NO.						
VBLK01	11354.	10.26	71848.	11.73	67121.	17.36
MW-2	10511.	10.27	66366.	11.73	63511.	17.41
MW-3	9555.	10.22	65138.	11.74	58280.	17.42
MW-5	9980.	10.27	61007.	11.69	58417.	17.38
MW-6	10346.	10.24	61340.	11.71	56479.	17.39
MW-7	9201.	10.24	57573.	11.70	53726.	17.39
MW-8	9535.	10.23	62069.	11.70	58906.	17.38
MW-9	10523.	10.27	63259.	11.69	58533.	17.37
FD111700	8931.	10.24	61662.	11.71	58401.	17.39
TB	9729.	10.28	61488.	11.70	58098.	17.38
MW-4 MS	9049.	10.27	62758.	11.74	58647.	17.42
MW-4 MSD	9552.	10.27	64294.	11.74	59696.	17.42
VMSB	9128.	10.26	62871.	11.73	56459.	17.41
MW-1	10358.	10.26	63109.	11.73	60001.	17.41

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Name: AES, Inc. Contract:
Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
File ID (Standard): DS177 Date Analyzed: 11/21/00
strument ID: H5970 D Time Analyzed: 11:47
Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA	#	RT	#	IS2(DFB) AREA	#	RT	#	IS3(CBZ) AREA	#	RT	#
	12 HOUR STD	12396.		10.26		80860.		11.72		73848.		17.40	
	UPPER LIMIT	24792.		10.76		161720.		12.22		147696.		17.90	
	LOWER LIMIT	6198.		9.76		40430.		11.22		36924.		16.90	
	EPA SAMPLE NO.												
1	VBLK02	11969.		10.26		78681.		11.72		74088.		17.40	
2	MW-4	10991.		10.25		71687.		11.71		66160.		17.38	
3													
4													
5													
6													
7													
8													
2													
3													
4													
5													
6													
7													
8													
9													
0													
1													
2													

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

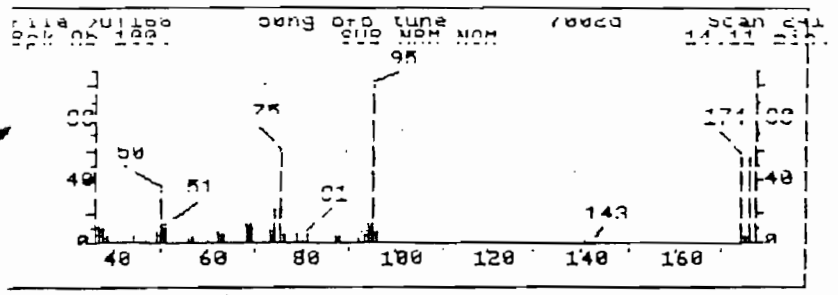
RAW QC

DATA

MS data file header from : >DT168::D4

Sample: 50ng bfb tune Operator: MANAGER SUPER GRP. 11/14/00 11:08
Misc : 7002d
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7002 D
Method file: METHOT Tuning file: MT900D No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	90.	230.	230.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0



>DT168 50ng bfb tune 7002d
241 SUB NRM NOM

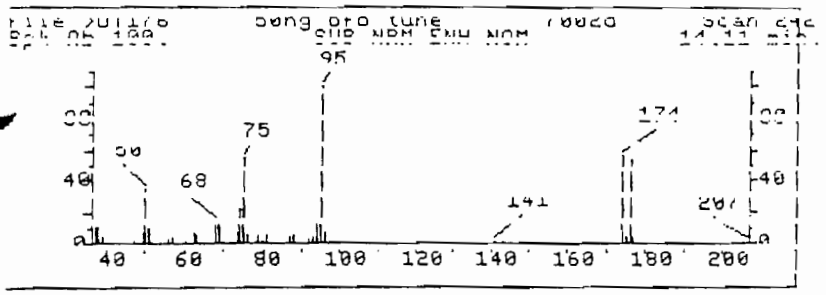
File: >DT168 Scan #: 241 Retn. time: 14.11

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.00	2.207	50.00	33.192	68.05	14.336	79.95	1.645	95.00	100.000
37.00	11.985	51.00	10.701	69.05	13.508	80.95	5.836	96.00	7.359
38.00	9.969	55.00	1.051	69.95	1.162	81.95	1.151	140.95	1.480
39.00	4.366	55.90	2.732	73.05	9.333	86.95	5.332	142.95	1.608
44.00	4.313	57.00	4.802	74.05	22.596	87.95	5.375	173.90	55.427
47.00	2.069	60.05	1.910	75.05	57.872	91.95	3.682	174.90	4.234
47.90	1.167	62.05	7.364	76.05	6.107	92.95	5.613	175.90	54.600
49.00	7.359	63.05	5.661	78.85	5.767	93.95	13.264	176.90	3.900

MS data file header from : >DT176::D4

Sample: 50ng bfb tune Operator: MANAGER SUPER GRP. 11/20/00 11:51
Misc : 7002d
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7002 D
Method file: METHDT Tuning file: MT400D No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	90.	230.	230.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0



>DT176 50ng bfb tune 7002d
242 SUB NRM ENH NOM

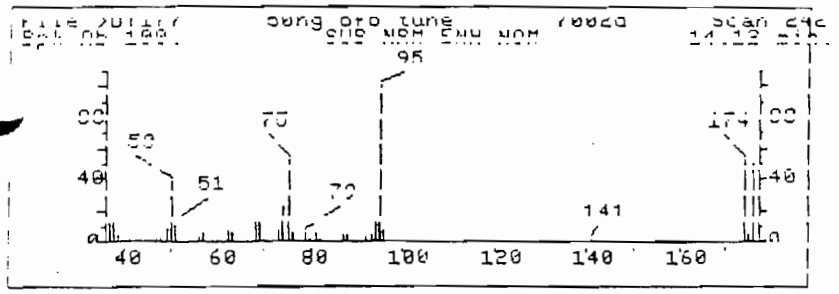
File: >DT176 Scan #: 242 Retn. time: 14.11

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.00	2.075	56.00	2.092	72.95	6.936	80.85	6.149	96.00	7.378
37.00	12.218	57.00	4.882	73.95	22.394	81.85	1.276	140.85	1.586
38.00	11.104	60.05	1.467	75.05	55.798	86.95	5.090	142.95	1.497
39.00	4.716	62.05	6.859	75.95	5.852	87.95	5.422	173.90	56.934
47.00	2.088	63.05	5.507	76.95	1.289	91.95	3.887	174.90	4.414
48.00	1.225	67.95	13.855	78.05	1.637	92.95	4.980	175.90	54.540
49.00	7.740	68.95	13.736	78.85	5.622	93.95	13.115	176.90	4.070
50.00	34.897	70.05	1.025	79.95	1.688	95.00	100.000	206.90	1.025
51.00	10.572								

```
MS data file header from : >DT177::D4

Sample: 50ng bfb tune          Operator: MANAGER   SUPER GRP.  11/21/00 11:23
Misc   : 7002d
Sys. #:     2  MS model:  70  SW/HW rev.: LF  ALS # :  0     Equip ID: 7002   D
  Method file: METHDT     Tuning file: MT900D   No. of extra records:  2
 Source temp.:   N/A  Analyzer temp.:  N/A      Transfer line temp. :   0

      Chromatographic temperatures :  90.   230.   230.     0.     0.
      Chromatographic times, min.  :  3.0   33.0   33.0    0.0    0.0
      Chromatographic rate, deg/min:  8.0     .1    0.0     .2    0.0
```



>DT177 50ng bfb tune 7002d
242 SUB NRM ENH NOM

File: >DT177 Scan #: 242 Retn. time: 14.12

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.00	2.759	55.00	1.030	69.95	1.424	79.85	1.513	95.00	100.000
37.00	14.206	56.00	3.209	73.05	7.113	80.85	6.119	96.00	6.924
38.00	12.306	57.00	5.704	74.05	22.379	81.85	1.350	140.95	1.520
39.00	5.275	60.05	1.551	75.05	52.151	86.95	5.136	142.95	1.199
47.00	2.632	62.05	7.948	76.05	5.926	87.95	4.840	173.90	52.115
47.90	1.303	63.05	5.799	77.05	1.001	91.95	3.321	174.90	4.488
49.00	8.463	67.95	14.742	78.05	1.024	92.95	5.021	175.90	49.747
50.00	39.294	69.05	14.396	78.85	6.450	93.95	12.833	176.90	3.727
51.00	11.764								

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Name: AES, Inc. Contract:
Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: VBLK
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: DB176
Level: (low/med) LOW Date Received:
% Moisture: not dec._____ Date Analyzed: 11/20/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

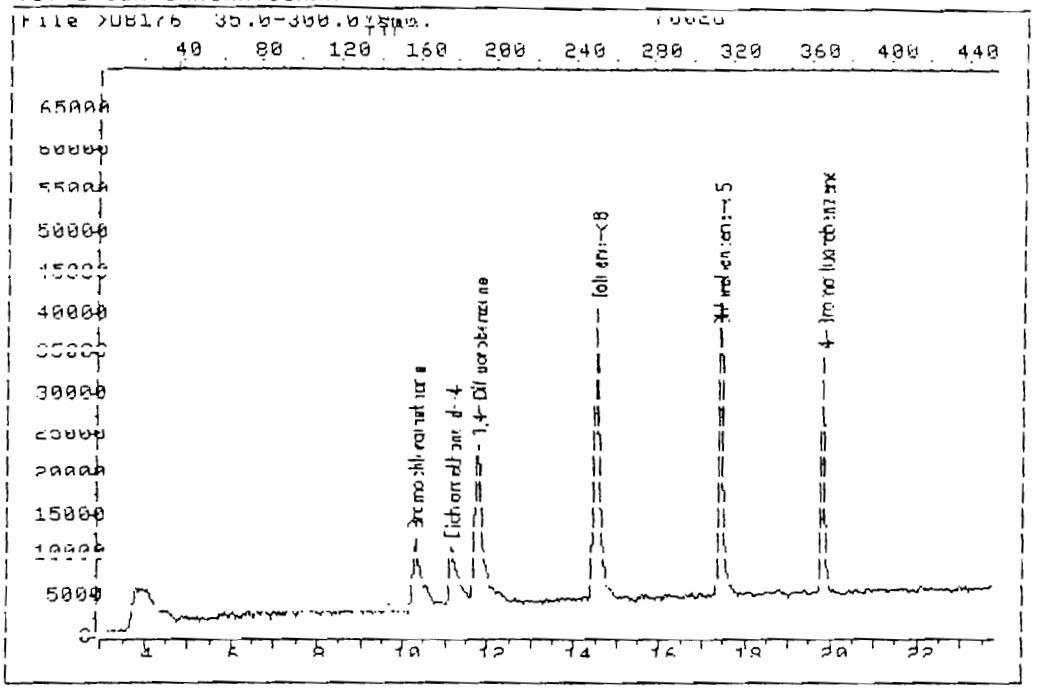
VBLK01

Name: AES, Inc. Contract:
Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
:rix: (soil/water) WATER Lab Sample ID: VBLK01
ıple wt/vol: 5.000 (g/mL) ML Lab File ID: DB176
/el: (low/med) LOW Date Received:
loisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
.l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
ımber TICs found: 0 (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
0.					

TOTAL ION CHROMATOGRAM



Data File: >DB176::D4 Quant Output File: ^DB176::D3
Name: vblk Instrument ID: 7002 D
Misc: 7002d

Id File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1116 11:35

Operator ID: MANAGER
Quant Time : 001120 13:16
Injected at: **1120 12:51

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 001120 13:16
Output File: ^D8176::D3 Injected at: **1120 12:51
Data File: >D8176::D4 Dilution Factor: 1.00000
Name: vblk Instrument ID: 7002 D
Misc: 7002d

ID File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1116 11:35

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.26	128.0	11354	50.00	UG	98
19)	1,2-Dichloroethane-d4	11.13	65.0	37010	49.18	UG	100
22)	*1,4-Difluorobenzene	11.73	114.0	71848	50.00	UG	94
36)	*Chlorobenzene-d5	17.36	117.0	67121	50.00	UG	95
42)	Toluene d-8	14.48	98.0	93447	47.60	UG	93
48)	Bromofluorobenzene	19.79	95.0	31415	46.13	UG	39

* Compound is ISTD

MS data file header from : >DB176::D4

Sample: vblk Operator: MANAGER SUPER GRP. 11/20/00 12:51
Misc : 7002d
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7002 D
Method file: METH04 Tuning file: MT9000 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	230.	230.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0

>DB176 vblk 7002d
35.01 300.0 CLP TIC
Upslope: .2000 Area Reject: 15568. Max Peaks: 2 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File DB176 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	3.82	14	19	39	5480	263723	210262	100.00	88.947
2	7.70	100	104	113	1123	115617	26129	12.43	11.053

Sum of corrected areas: 236391.

Summary of Unknowns PBM Library Search and Quantitation

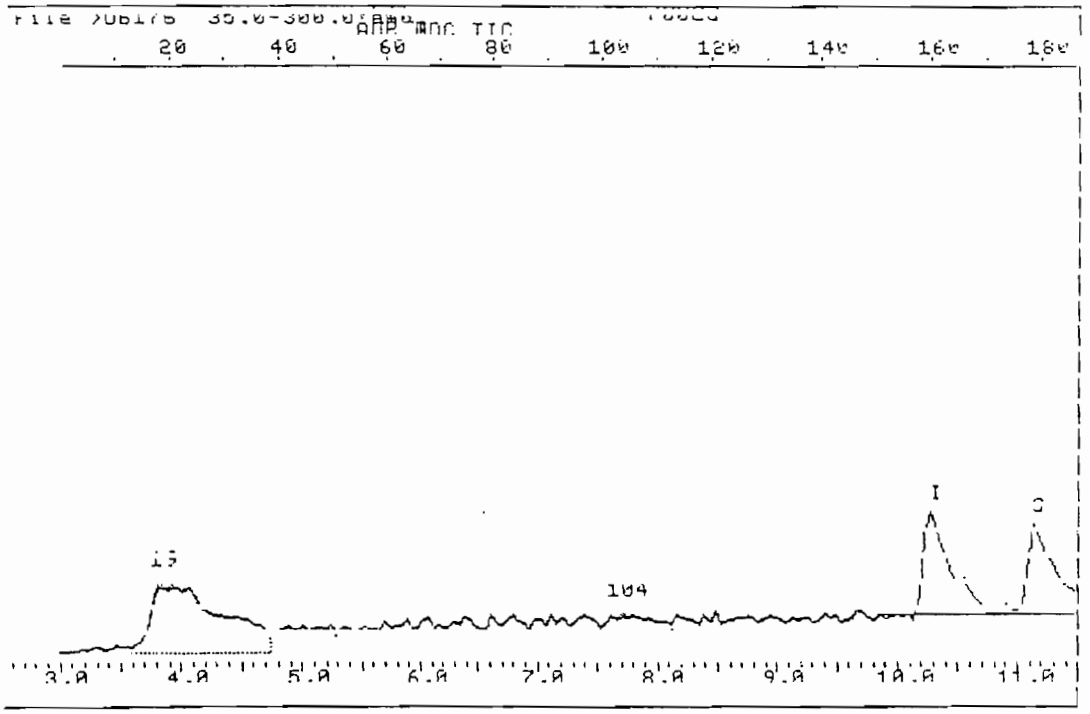
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	155676.	10.26	3.00 - 11.00
2	50.0	275652.	11.73	11.00 - 14.55
3	50.0	308763.	17.36	14.55 - 23.78

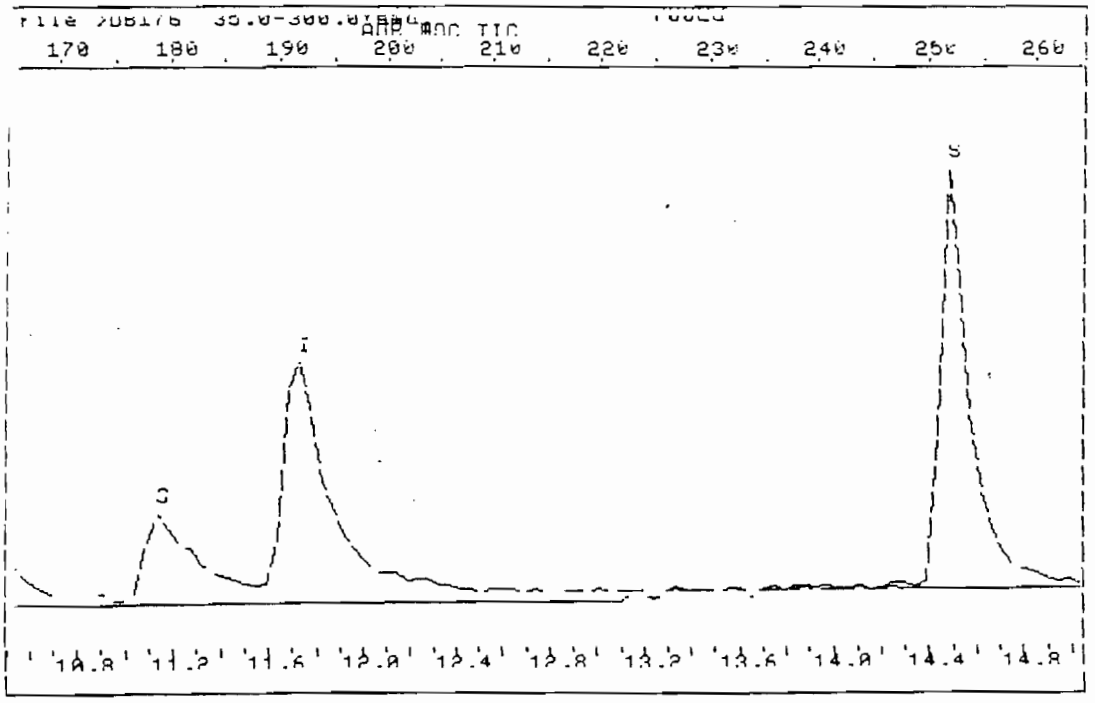
Dilution Factor = 1.00 This sample was 1000.00 g or mL

Correction Factor = 1.00

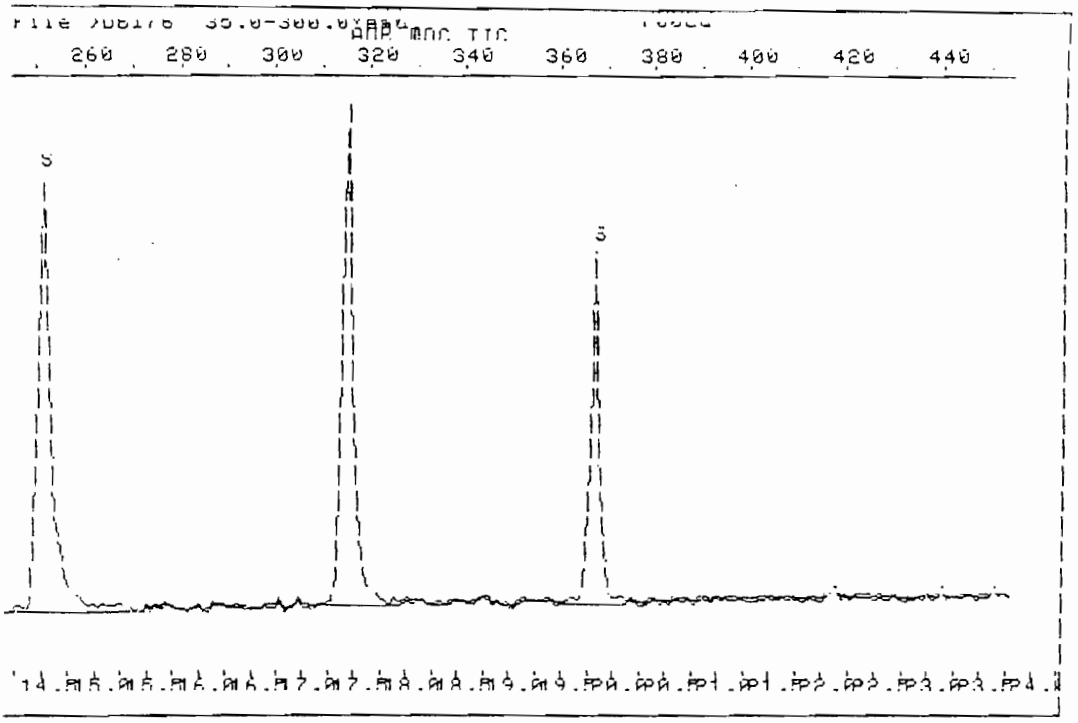
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

11:38 AM WED., 29 NOV., 2000





Instrument ID: 7002 Analyzed on: 11/20/00 12:51



Instrument ID: 7002 Analyzed on: 11/20/00 12:51

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02

Name: AES, Inc. Contract:
Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: VBLK
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: DB177
Level: (low/med) LOW Date Received:
% Moisture: not dec._____ Date Analyzed: 11/21/00
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

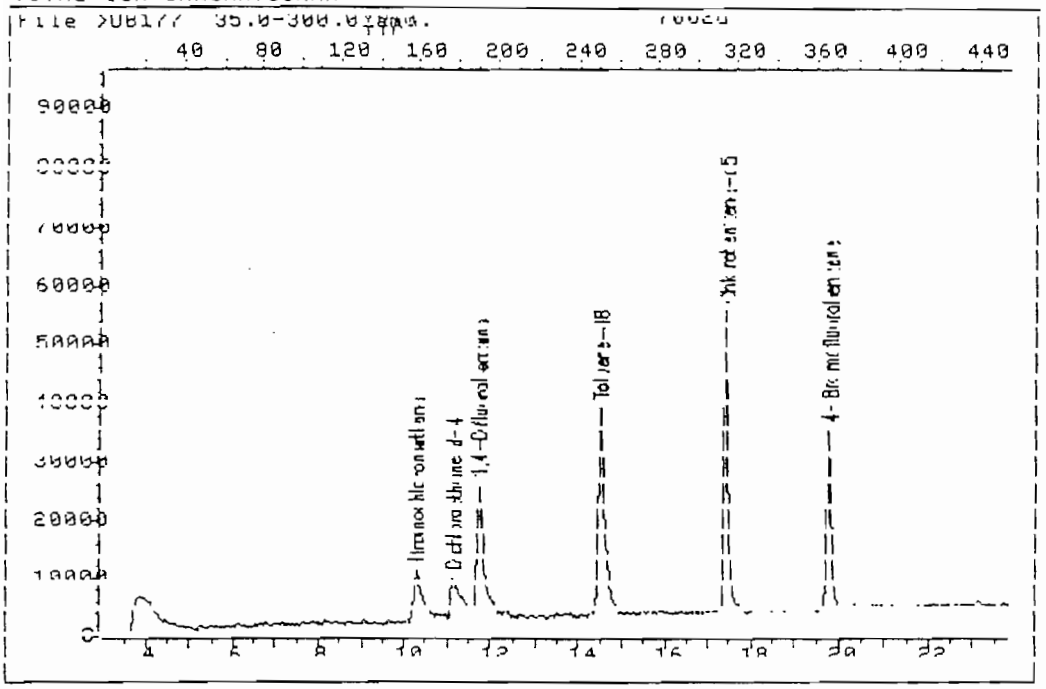
VBLK02

ɔ Name: AES, Inc. Contract:
ɔ Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
ɔrix: (soil/water) WATER Lab Sample ID: VBLK02
ɱple wt/vol: 5.000 (g/mL) ML Lab File ID: DB177
vel: (low/med) LOW Date Received:
ɱoisture: not dec._____ Date Analyzed: 11/21/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

ɱber TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

TOTAL ION CHROMATOGRAM



Data File: >DB177::D4 Quant Output File: ^DB177::D3
Name: vblk Instrument ID: 7002 D
Misc: 7002d

Id File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1121 11:47

Operator ID: MANAGER
Quant Time : 001121 13:50
Injected at: **1121 12:17

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 001121 13:50
Output File: ^DB177::D3 Injected at: **1121 12:17
Data File: >DB177::D4 Dilution Factor: 1.00000
Name: vblk Instrument ID: 7002 D
Misc: 7002d

ID File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1121 11:47

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.26	128.0	11969	50.00	UG	99
19)	1,2-Dichloroethane-d4	11.13	65.0	41221	47.76	UG	100
22)	*1,4-Difluorobenzene	11.72	114.0	78681	50.00	UG	95
36)	*Chlorobenzene-d5	17.40	117.0	74088	50.00	UG	94
42)	Toluene d-8	14.47	98.0	105224	49.36	UG	94
48)	Bromofluorobenzene	19.79	95.0	36025	50.17	UG	48

* Compound is ISTD

.S data file header from : >DB177::D4

Sample: vblk Operator: MANAGER SUPER GRP. 11/21/00 12:17
Misc : 7002d
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7002 D
Method file: METH04 Tuning file: MT9110D No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	250.	250.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0

>DB177 vblk 7002d
35.01 300.0 CLP TIC
Upslope: .2000 Area Reject: 16125. Max Peaks: 1 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IDB177 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	3.87	12	19	48	6593	313811	259444	100.00	100.000

Sum of corrected areas: 259444.

Summary of Unknowns PBM Library Search and Quantitation

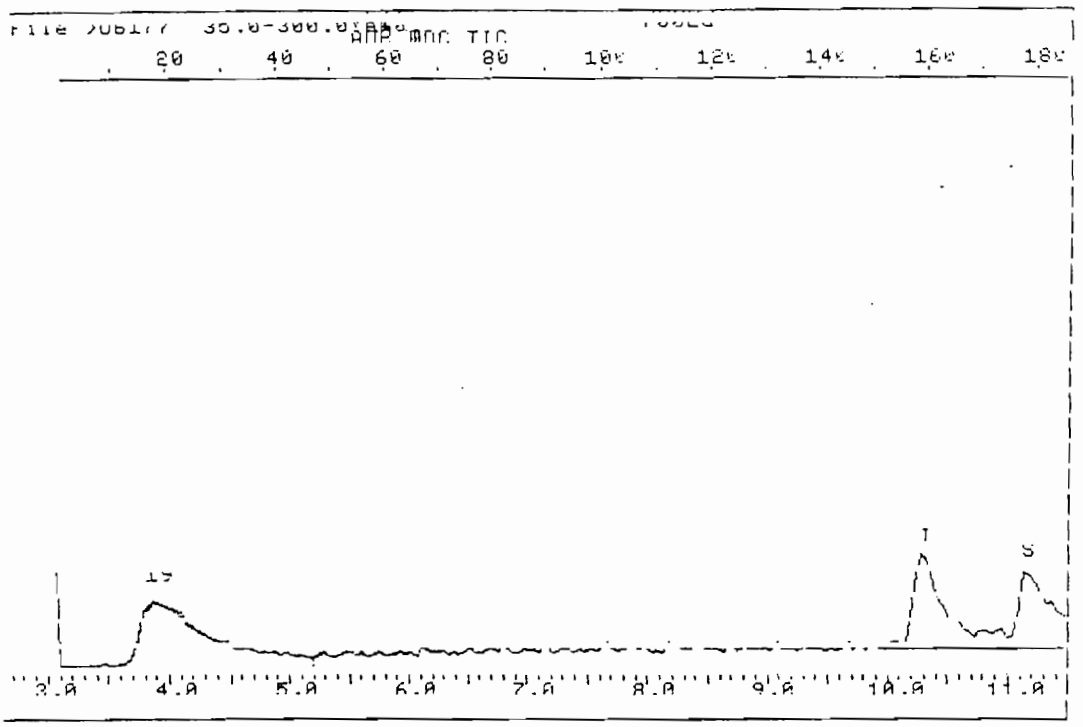
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	161251.	10.26	3.05 - 10.99
2	50.0	264473.	11.72	10.99 - 14.56
3	50.0	353765.	17.40	14.56 - 23.82

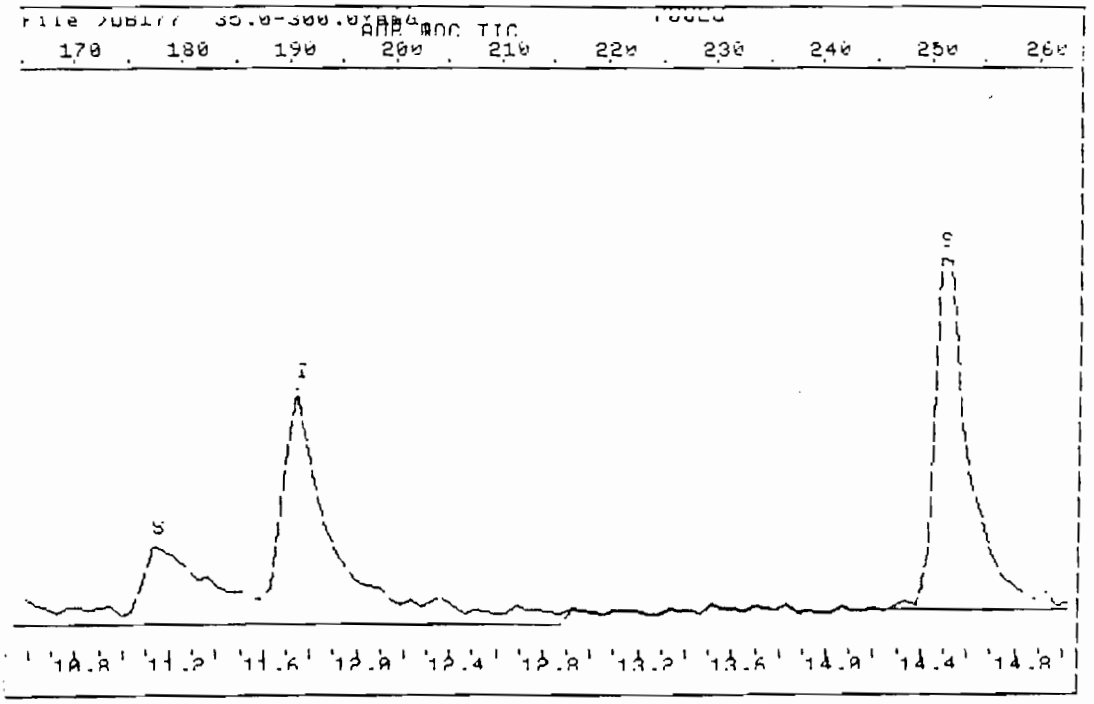
Dilution Factor = 1.00 This sample was 1000.00 g or mL

Correction Factor = 1.00

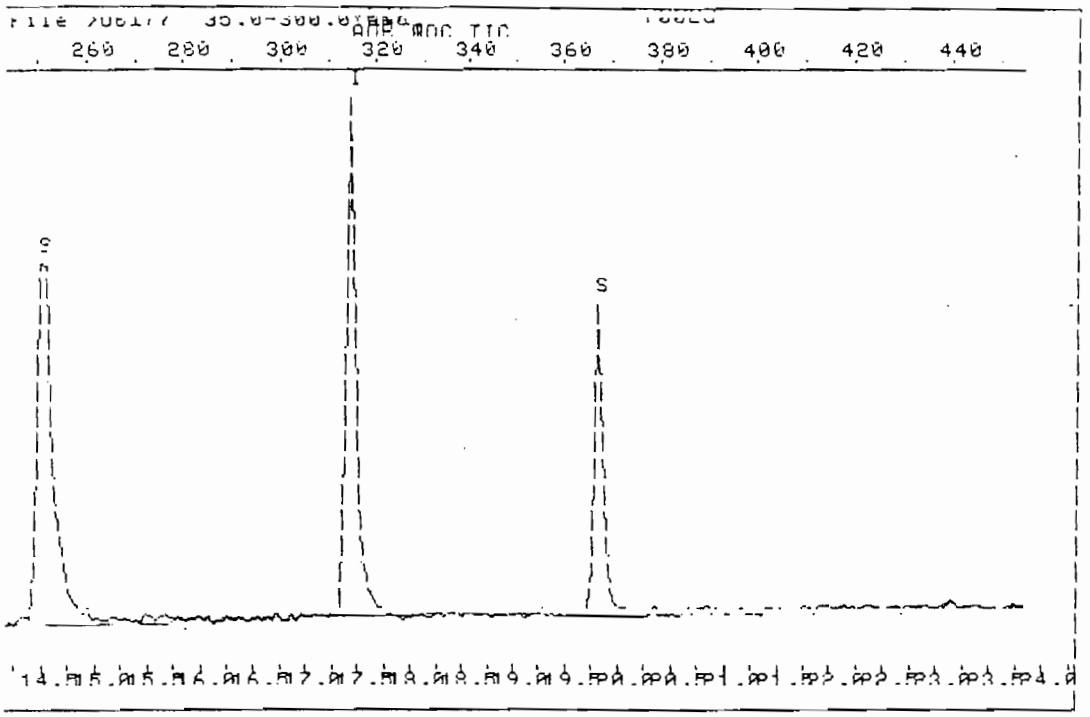
$$\text{Unknown Concentration} = \frac{|\text{Conc Int Std} * \text{Area Unknown}|}{|\text{Area Int Std}|} * \text{Correction Factor}$$

11:52 AM WED., 29 NOV., 2000





Instrument ID: 7002 Analyzed on: 11/21/00 12:17



Instrument ID: 7002 Analyzed on: 11/21/00 12:17

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VMSB

Name: AES, Inc. Contract:

Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1

Matrix: (soil/water) WATER Lab Sample ID: VMSB

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: D2077

Level: (low/med) LOW Date Received: 11/17/00

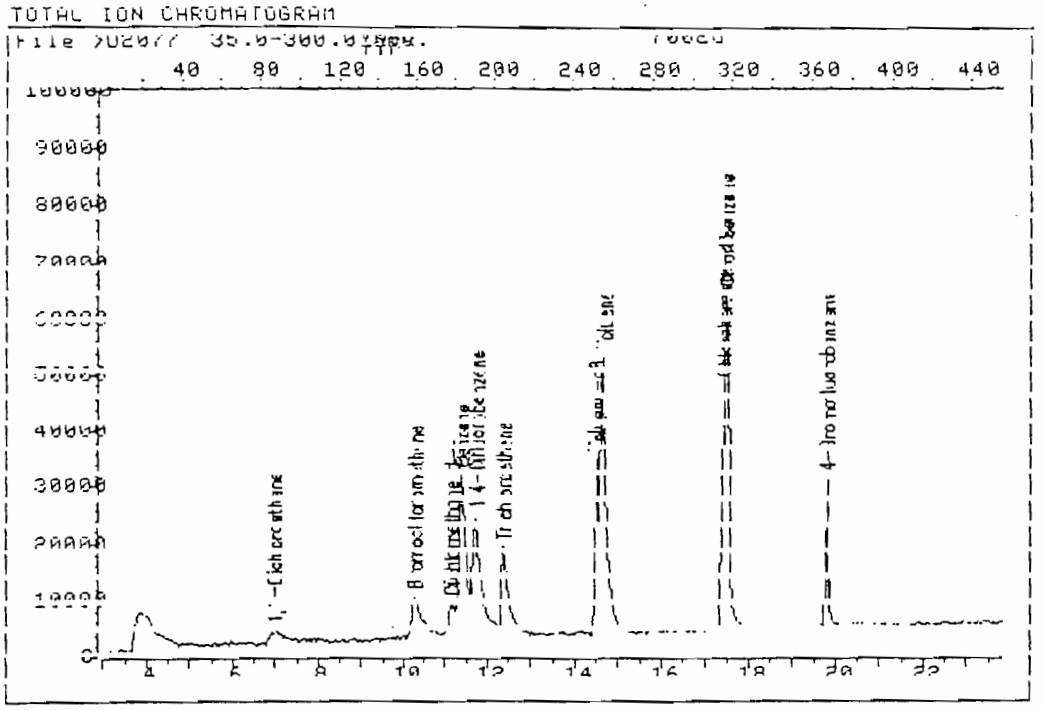
Moisture: not dec._____ Date Analyzed: 11/20/00

GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0

CONC. Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	44.	
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	55.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	57.	
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	61.	
108-90-7	Chlorobenzene	62.	
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

TOTAL ION CHROMATOGRAM



Data File: >D2077::D4 Quant Output File: ^D2077::D3
Name: vmsb Instrument ID: 7002 D
Misc: 7002d

Id File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1120 12:22

Operator ID: MANAGER
Quant Time : 001120 21:05
Injected at: **1120 20:41

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 001120 21:05
Output File: ^D2077::D3 Injected at: **1120 20:41
Data File: >D2077::D4 Dilution Factor: 1.000000
Name: vmsb Instrument ID: 7002 D
Misc: 7002d

ID File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1120 12:22

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.26	128.0	9128	50.00	UG	94
14)	1,1-Dichloroethene	6.97	96.0	8115	43.51	UG	69
19)	1,2-Dichloroethane-d4	11.13	65.0	33504	52.17	UG	100
22)	*1,4-Difluorobenzene	11.73	114.0	62871	50.00	UG	95
29)	Trichloroethene	12.37	130.0	22307	55.27	UG	89
32)	Benzene	11.36	78.0	130919	56.95	UG	58
36)	*Chlorobenzene-d5	17.41	117.0	56459	50.00	UG	93
41)	Toluene	14.66	91.0	132973	61.16	UG	97
42)	Toluene d-8	14.48	98.0	83324	52.36	UG	94
43)	Chlorobenzene	17.46	112.0	70776	61.88	UG	98
48)	Bromofluorobenzene	19.79	95.0	28397	54.18	UG	41

* Compound is ISTD

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4 MS

Name: AES, Inc. Contract:

Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1

Matrix: (soil/water) WATER Lab Sample ID: MW-4 MS

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: D2075

Level: (low/med) LOW Date Received: 11/17/00

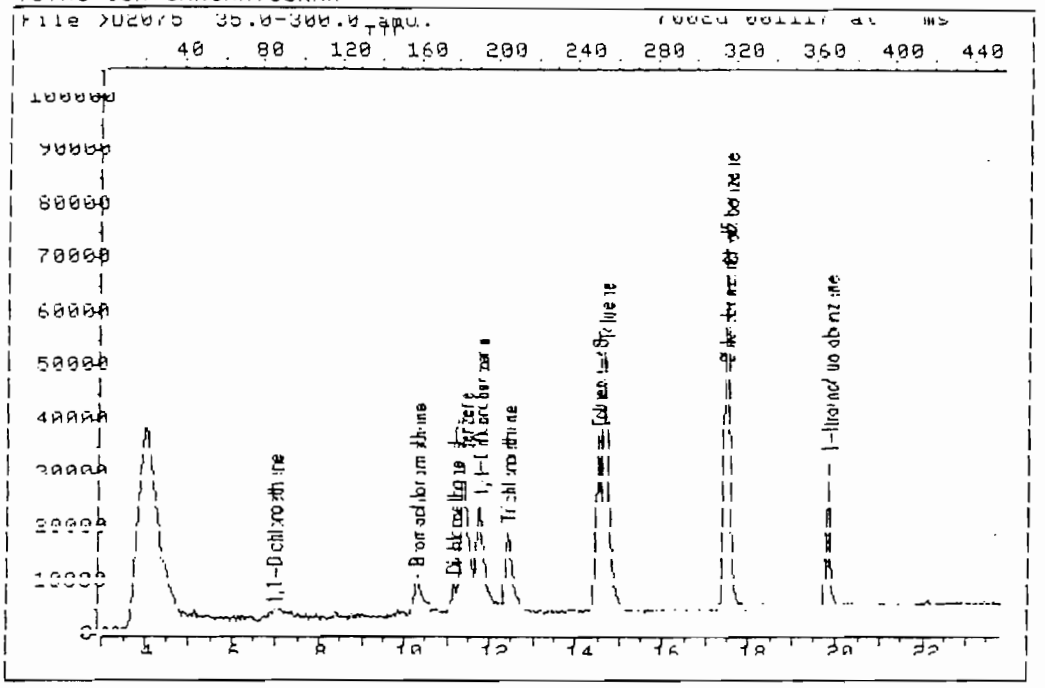
Moisture: not dec._____ Date Analyzed: 11/20/00

GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	43.	
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	55.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	57.	
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	59.	
108-90-7	Chlorobenzene	60.	
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

TOTAL ION CHROMATOGRAM



Data File: >D2075::D4 Quant Output File: ^D2075::D3
Name: Instrument ID: 7002 D
Misc: 7002d 001117 at ms

Id File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1120 12:22

Operator ID: MANAGER
Quant Time : 001120 20:07
Injected at: **1120 19:42

QUANT REPORT

Operator ID: MANAGER
Output File: ^D2075::D3
Data File: >D2075::D4
Name:
Misc: 7002d 001117 at ms

Quant Rev: 7 Quant Time: 001120 20:02
Injected at: **1120 19:42
Dilution Factor: 1.00000
Instrument ID: 7002 D

ID File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1120 12:22

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.27	128.0	9049	50.00	UG	93
14)	1,1-Dichloroethene	6.93	96.0	8026	43.41	UG	74
19)	1,2-Dichloroethane-d4	11.14	65.0	34240	53.78	UG	100
22)	*1,4-Difluorobenzene	11.74	114.0	62758	50.00	UG	94
29)	Trichloroethene	12.38	130.0	22153	54.98	UG	92
32)	Benzene	11.37	78.0	131740	57.41	UG	57
36)	*Chlorobenzene-d5	17.42	117.0	58647	50.00	UG	94
41)	Toluene	14.62	91.0	132236	58.55	UG	98
42)	Toluene d-8	14.48	98.0	84925	51.38	UG	96
43)	Chlorobenzene	17.46	112.0	71091	59.84	UG	
48)	Bromofluorobenzene	19.80	95.0	29372	53.95	UG	

* Compound is ISTD

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

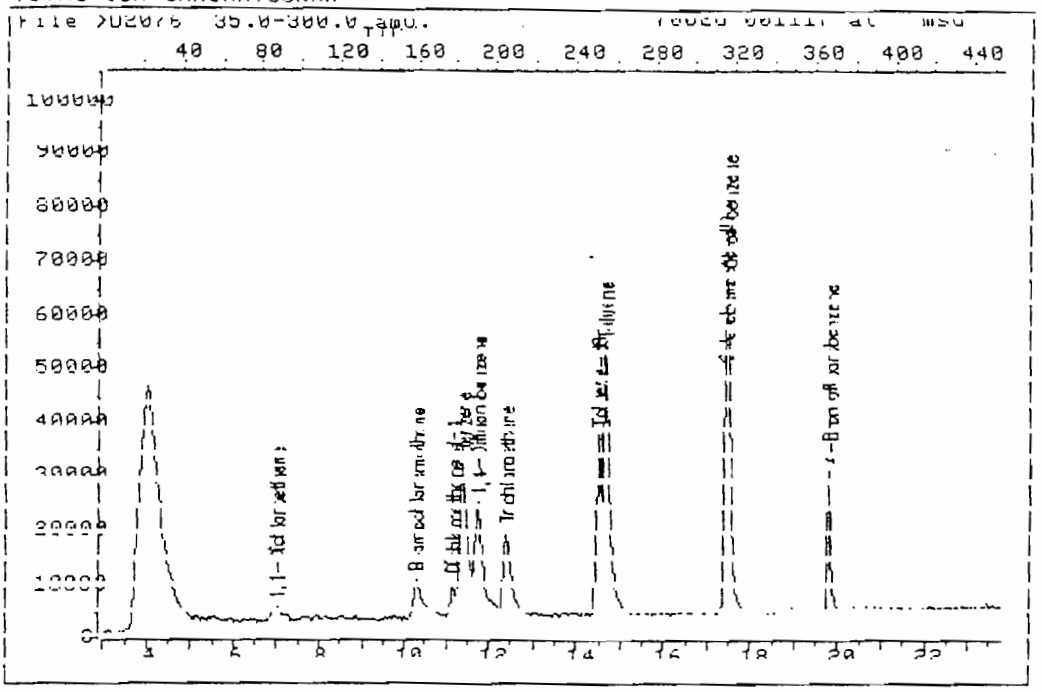
EPA SAMPLE NO.

MW-4 MSD

Name: AES, Inc. Contract:
Code: AES Case No.: ETH0020 SAS No.: SDG No.: MW-1
rix: (soil/water) WATER Lab Sample ID: MW-4 MSD
ple wt/vol: 5.000 (g/mL) ML Lab File ID: D2076
el: (low/med) LOW Date Received: 11/17/00
oisture: not dec._____ Date Analyzed: 11/20/00
Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	40.	
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	54.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	57.	
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	59.	
108-90-7	Chlorobenzene	59.	
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

TOTAL ION CHROMATOGRAM



Data File: >D2076::D4 Quant Output File: ^D2076::D3
Name: Instrument ID: 7002 D
Misc: 7002d 001117 at4 msd

Id File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1120 12:22

Operator ID: MANAGER
Quant Time : 001120 20:36
Injected at: **1120 20:11

Operator ID: MANAGER Quant Rev: 7 Quant Time: 001120 20:36
Output File: ^D2076::D3 Injected at: **1120 20:11
Data File: >D2076::D4 Dilution Factor: 1.00000
Name: Instrument ID: 7002 D
Misc: 7002d 001117 at4 msd

ID File: IDSS91::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000616 12:38 Last Qcal Time: **1120 12:22

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.27	128.0	9552	50.00	UG	99
14)	1,1-Dichloroethene	6.98	96.0	7721	39.56	UG	75
19)	1,2-Dichloroethane-d4	11.14	65.0	34282	51.01	UG	100
22)	*1,4-Difluorobenzene	11.74	114.0	64294	50.00	UG	93
29)	Trichloroethene	12.38	130.0	22398	54.26	UG	92
32)	Benzene	11.37	78.0	133618	56.84	UG	57
36)	*Chlorobenzene-d5	17.42	117.0	59696	50.00	UG	91
41)	Toluene	14.62	91.0	134658	58.57	UG	97
42)	Toluene d-8	14.48	98.0	85294	50.69	UG	94
43)	Chlorobenzene	17.46	112.0	71318	58.97	UG	98
48)	Bromofluorobenzene	19.80	95.0	27983	50.50	UG	41

* Compound is ISTD

CLP

SAMPLE CALCULATIONS FOR VOLATILE ORGANICS:

1) **RRF of Trichloroethene from the VSTD050 analyzed on 11/20/00:**

$$= \frac{\text{area of Trichloroethene in std.}}{\text{area of internal std}} \quad \mathbf{X} \quad \frac{\text{concentration of internal standard.}}{\text{concentration of standard}}$$

$$= \frac{23510}{73240} \times \frac{50}{50} = 0.321$$

2) **Amount of Trichloroethene in sample MW-3 (AES sample number 001117AT-03):**

$$\text{ug/L} = \frac{\text{area of Trichloroethene in sample}}{\text{area of internal standard in sample}} \times \frac{\text{amount of internal std. (ng)}}{\text{(ml of sample purged)(RRF)}}$$

$$= \frac{69358}{65138} \times \frac{(250)}{(5.0)(0.321)} = 165.9 \text{ ug/L}$$

which is reported as 170 ug/L on the Form I for Volatile Organics

3) **Calculation of spike recovery for Trichloroethene in sample MW-4 MS:**

$$\text{Percent spike recovery} = \frac{\text{quantity determined by analysis}}{\text{quantity added to sample}} \times 100$$

$$\text{\% recovery of Trichloroethene} = \frac{(55.0 - 0.0)}{50.0} \times 100 = 110.0\ \%$$

APPENDIX H

LABORATORY ANALYTICAL REPORTS & DUSR – MARCH 31, 2001
GROUNDWATER RESULTS

Organic Data Usability Summary Report
Former Wilsonart Facility
Adirondack Environmental Services, New York
SDG # MW-1 (2)

Analytical results for 13 (thirteen) groundwater samples and 1 (one) duplicated sample from the above referenced site were reviewed to evaluate the data quality. Data were assessed in accordance with SW-846 Method 624 (Freon 113 and Tentatively Identified Compounds), Rev. 3 (12/96), the United States Environmental Protection Agency (USEPA) document **USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review** (February 1994), the USEPA Region II document **CLP Organics Data Review and Preliminary Review** (SOP No. HW-6, Revision No. 8, January 1992), where applicable. This validation pertains to the following sample collected by Earth Tech personnel on March 30, 2001 and received at the lab on March 31, 2001.

MW-1(2)	MW-4(2)	MW-8(1)	DUP033001
MW-2(2)	MW-5(2)	MW-8(2)	
MW-3(1)	MW-6(2)	MW-8(3)	
MW-3(2)	MW-7(2)	MW-9(2)	

The following items/criteria applicable to the samples listed above were reviewed:

X Deliverable Requirements
X Case Narrative
X Holding Times and Sample Preparation
X GC/MS Instrument Performance Check
X Initial and Continuing Calibration Data
X Method and Field Blank Summary and Data
X Surrogate Recoveries
X Matrix Spike/Matrix Spike Duplicates
X Matrix Spike Blank
X Internal Standard Areas and Retention Times
X Target Compound Identification/Quantitation
X Quantitation Reports and Mass Spectral Data

This above listed sample was analyzed by method SW846 624, for Volatile Organic Compounds including Freon 113 and TICS. The data have been reviewed according to the above procedures and qualified as described below.

Method 624 – Volatile Organic Compounds:

- The Initial Calibration conducted on 03/30/01 exhibited a percent relative standard deviations (%RSD) greater than 30% between the relative response factors (RRF) of five different standard concentrations for the analyte chloromethane (33%). Per USEPA validation guidelines, compounds exhibiting a %RSD outside of the QC limits are considered estimated in all the sample results. Positive sample results are flagged "J", and non-detect sample results are flagged "UJ".

- The table below lists the continuing calibration compounds that exhibited greater than 25% difference between the initial and continuing calibration responses, and the associated samples. Per USEPA validation guidelines all sample results associated with out-of-control calibration data are considered estimated with positive results flagged "J" and non-detect results flagged "UJ".

Calibration	Compound	%D	Associated Samples
CC: 04/06/01	acetone 2-butanone 2-hexanone 1,1,2,2-tetrachoroethane 1,2-dichloroethene	52.5 60.0 40.6 27.8 28.1	All samples except MW-1(2) and MW-2(2)
CC: 04/07/01	2-butanone 1,1,2,2-tetrachloroethane 1,2-dichloroethene-cis	26.8 28.8 28.8	MW-8(2) DL, MW-8(3)DL, and DUP033001 DL
CC: 04/09/01	chloroethane 2-butanone carbon tetrachloride	26.7 44.4 31.8	MW-1(2), MW-2(2), and MW-8(1) DL

- The table below lists the laboratory method blanks and trip blanks analyzed in association with the listed samples in this data package that exhibited a concentration above the contract required detection limit. Per USEPA validation guidelines, all sample results less than ten times the associated method blank value for common laboratory contaminant compounds (methylene chloride, acetone, 2-butanone) are considered to be laboratory derived and are therefore negated. Any sample result of a non-laboratory contaminant less than five times the associated method blank value are considered to be laboratory derived and are therefore negated.

Method Blank	Compound	Result	Associated Samples
VBLK01	chloroform	2 JJ	All samples except MW-1(2) and MW-2(2)
VBLK02	chloroform	2 J	MW-8(2) DL, MW-8(3)DL, and DUP033001 DL
VBLK03	chloroform	2 J	MW-1(2), MW-2(2), and MW-8(1) DL
TB033001	methylene chloride	4 J	All samples

Summary:

In summary, based on 504 sample data points, 73 of which were qualified as estimated ("J"), and 0 qualified as unusable, and since estimated data are fully compliant and usable, the usability of this data package is 100%.

Minda Kirk — 5/14/01

Prepared By
Minda Kirk
Environmental Scientist

Date

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-1(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1192
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/09/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U J
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U J
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U J
71-55-6	1,1,1-Trichloroethane	2.	J
56-23-5	Carbon Tetrachloride	5.	U J
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	27.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	120.	

Com 08/26/03

1E

EPA SAMPLE NO.

MW-1(2)

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-1(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1192
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/09/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Hydrocarbon	14.84	42.	J
2.		Hydrocarbon	16.75	33.	J
3.		Hydrocarbon	17.51	78.	J
4.		Hydrocarbon	18.99	71.	J
5.		Hydrocarbon	19.89	100.	J
6.		Unknown	20.15	100.	J
7.		Hydrocarbon	20.72	52.	J
8.		Hydrocarbon	21.23	220.	J
9.		Hydrocarbon	21.56	120.	J
10.		Hydrocarbon	22.13	46.	J
11.		Hydrocarbon	22.57	93.	J
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-2(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1193
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/09/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U J
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U J
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5 ~~2.~~	~~B J~~ U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U J
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U J
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	10.	U

CBM 02/26/03

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-2(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-2(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1193
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/09/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	12.11	100.	J
2.		Unknown	15.11	94.	J
3.		Hydrocarbon	15.61	83.	J
4.		Hydrocarbon	15.90	160.	J
5.		Hydrocarbon	19.08	71.	J
6.		Hydrocarbon	21.76	160.	J
7.					
8.					
9.					
10.					
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1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-3(1)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-3(1)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1154
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U J
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U J
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U J
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	8.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U J
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U J
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U J
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	46.	

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1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-3(1)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-3(1)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1154
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		oxygenated compound	17.27	11.	
2.		oxygenated compound	22.11	6.	
3.					
4.					
5.					
6.					
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1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-3(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-3(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1175
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	UJ
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	UJ
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5 ~~2.~~	~~BJ~~ U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	UJ
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	8.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	UJ
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	UJ
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	UJ
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	30.	

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-3(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-3(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1175
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3(3)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-3(3)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1165
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	UJ
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	UJ
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	UJ
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	9.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	UJ
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	UJ
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	UJ
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	46.	

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-3(3)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-3(3)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1165
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-4(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1159
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	UJ
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	UJ
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	UJ
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	UJ
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	UJ
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	UJ
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	10.	U

CBM 02/26/03

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-4(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-4(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1159
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Oxygenated compound	17.29	8.	J
2.		Unknown	22.12	5.	J
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
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1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-5(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-5(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1160
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	UJ
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	UJ
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	UJ
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	11.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	UJ
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	UJ
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	UJ
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	85.	

GBr 02/26/03

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-5(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-5(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1160
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-6(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-6(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1168
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U J
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U J
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	3.	J
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U J
71-55-6	1,1,1-Trichloroethane	4.	J
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	23.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U J
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U J
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U J
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	110.	

CBM 02/26/03

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-6(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-6(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1168
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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3.					
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1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-7(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-7(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1162
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	UJ
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	UJ
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	UJ
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	2.	J
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	UJ
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	UJ
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	UJ
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	4.	J

CBM 02/26/03

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-7(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-7(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1162
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	22.70	7.	J
2.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8(1)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(1)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1155
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	UJ
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	UJ
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	~~5~~ 4.	~~BJ~~ U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	UJ
71-55-6	1,1,1-Trichloroethane	5.	J
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	62.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	UJ
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	UJ
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	UJ
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	490.	

CBM 02/26/03

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-8(1)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(1)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1155
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN OXYGENATED CMPND	17.29	5.	J
2.	- -	UNKNOWN	19.99	6.	J
3.	- -	UNKNOWN	20.86	50.	J
4.	- -	UNKNOWN HYDROCARBON	21.51	9.	J
5.	- -	UNKNOWN	22.12	20.	J
6.	- -	UNKNOWN	22.27	20.	J
7.	- -	UNKNOWN HYDROCARBON	22.52	30.	J
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8(1) DL

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(1) DL
Sample wt/vol: 1.000 (g/mL) ML Lab File ID: C1191
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/09/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50.	U J
74-83-9	Bromomethane	50.	U
75-01-4	Vinyl Chloride	50.	U
75-00-3	Chloroethane	50.	U J
75-09-2	Methylene Chloride	25.	U
67-64-1	Acetone	50.	U
75-15-0	Carbon Disulfide	25.	U
75-35-4	1,1-Dichloroethene	25.	U
75-34-3	1,1-Dichloroethane	25.	U
156-60-5	1,2-Dichloroethene-trans	25.	U
67-66-3	Chloroform	25 ~~13.~~	~~B J~~ U
107-06-2	1,2-Dichloroethane	25.	U
78-93-3	2-Butanone	50.	U J
71-55-6	1,1,1-Trichloroethane	25.	U
56-23-5	Carbon Tetrachloride	25.	U J
75-27-4	Bromodichloromethane	25.	U
78-87-5	1,2-Dichloropropane	25.	U
10061-01-5	cis-1,3-Dichloropropene	25.	U
79-01-6	Trichloroethene	55.	
124-48-1	Dibromochloromethane	25.	U
79-00-5	1,1,2-Trichloroethane	25.	U
71-43-2	Benzene	25.	U
10061-02-6	trans-1,3-Dichloropropene	25.	U
75-25-2	Bromoform	25.	U
108-10-1	4-Methyl-2-Pentanone	50.	U
591-78-6	2-Hexanone	50.	U
127-18-4	Tetrachloroethene	25.	U
79-34-5	1,1,2,2-Tetrachloroethane	25.	U
108-88-3	Toluene	25.	U
108-90-7	Chlorobenzene	25.	U
100-41-4	Ethylbenzene	25.	U
100-42-5	Styrene	25.	U
156-59-2	1,2-Dichloroethene-cis	25.	U
106-42-3	m,p-Xylenes	25.	U
95-47-6	o-Xylene	25.	U
76-13-1	Freon 113	510.	

CBM 02/26/03

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-8(1) DL

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(1) DL
Sample wt/vol: 1.000 (g/mL) ML Lab File ID: C1191
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/09/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1174
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	UJ
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	UJ
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5 ~~3~~.	~~BJ~~ U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	UJ
71-55-6	1,1,1-Trichloroethane	4.	J
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	49.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	UJ
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	UJ
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	320.	

CGM 02/26/03

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-8(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1174
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Oxygenated compound	17.33	16.	J
2.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8(2) DL

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(2) DL
Sample wt/vol: 2.500 (g/mL) ML Lab File ID: C1179
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/07/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	20.	U J
74-83-9	Bromomethane	20.	U
75-01-4	Vinyl Chloride	20.	U
75-00-3	Chloroethane	20.	U
75-09-2	Methylene Chloride	10.	U
67-64-1	Acetone	20.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	1,2-Dichloroethene-trans	10.	U
67-66-3	Chloroform	10 ~~6.~~	~~BJ~~ U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	20.	U J
71-55-6	1,1,1-Trichloroethane	4.	J
56-23-5	Carbon Tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	56.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
10061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	20.	U
591-78-6	2-Hexanone	20.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U J
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
156-59-2	1,2-Dichloroethene-cis	10.	U J
106-42-3	m,p-Xylenes	10.	U
95-47-6	o-Xylene	10.	U
76-13-1	Freon 113	410.	

CBM 02/26/03

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-8(2) DL

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(2) DL
Sample wt/vol: 2.500 (g/mL) ML Lab File ID: C1179
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/07/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8(3)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(3)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1166
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U J
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U J
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5 4.	B U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U J
71-55-6	1,1,1-Trichloroethane	5.	J
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	62.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U J
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U J
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U J
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	500.	E

CBM 02/26/03

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-8(3)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(3)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1166
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8(3) DL

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(3) DL
Sample wt/vol: 1.000 (g/mL) ML Lab File ID: C1177
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/07/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50.	U J
74-83-9	Bromomethane	50.	U
75-01-4	Vinyl Chloride	50.	U
75-00-3	Chloroethane	50.	U
75-09-2	Methylene Chloride	25.	U
67-64-1	Acetone	50.	U
75-15-0	Carbon Disulfide	25.	U
75-35-4	1,1-Dichloroethene	25.	U
75-34-3	1,1-Dichloroethane	25.	U
156-60-5	1,2-Dichloroethene-trans	25.	U
67-66-3	Chloroform	25 ~~15.~~	~~BJ~~ U
107-06-2	1,2-Dichloroethane	25.	U
78-93-3	2-Butanone	50.	U J
71-55-6	1,1,1-Trichloroethane	5.	J
56-23-5	Carbon Tetrachloride	25.	U
75-27-4	Bromodichloromethane	25.	U
78-87-5	1,2-Dichloropropane	25.	U
10061-01-5	cis-1,3-Dichloropropene	25.	U
79-01-6	Trichloroethene	61.	
124-48-1	Dibromochloromethane	25.	U
79-00-5	1,1,2-Trichloroethane	25.	U
71-43-2	Benzene	25.	U
10061-02-6	trans-1,3-Dichloropropene	25.	U
75-25-2	Bromoform	25.	U
108-10-1	4-Methyl-2-Pentanone	50.	U
591-78-6	2-Hexanone	50.	U
127-18-4	Tetrachloroethene	25.	U
79-34-5	1,1,2,2-Tetrachloroethane	25.	U J
108-88-3	Toluene	25.	U
108-90-7	Chlorobenzene	25.	U
100-41-4	Ethylbenzene	25.	U
100-42-5	Styrene	25.	U
156-59-2	1,2-Dichloroethene-cis	25.	U J
106-42-3	m,p-Xylenes	25.	U
95-47-6	o-Xylene	25.	U
76-13-1	Freon 113	520.	

Cbm 02/26/03

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-8(3) DL

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(3) DL
Sample wt/vol: 1.000 (g/mL) ML Lab File ID: C1177
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/07/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-9(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-9(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1164
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U J
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	3.	J
67-64-1	Acetone	10.	U J
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	J
75-34-3	1,1-Dichloroethane	4.	J
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U J
71-55-6	1,1,1-Trichloroethane	15.	
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U J
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U J
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U J
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	21.	

cbm 02/26/03

1E

EPA SAMPLE NO.

MW-9(2)

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-9(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1164
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Oxygenated compound	17.32	12.	J
2.		Unknown	22.15	12.	J
3.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: DUP033001
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1167
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U J
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U J
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5 ~~3~~.	~~B~~ U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U J
71-55-6	1,1,1-Trichloroethane	4.	J
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	51.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U J
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U J
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U J
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	430.	

ABM 02/26/03

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

DUP

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: DUP033001
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1167
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP DL

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: DUP033001 DL
Sample wt/vol: 1.000 (g/mL) ML Lab File ID: C1178
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/07/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50.	U J
74-83-9	Bromomethane	50.	U
75-01-4	Vinyl Chloride	50.	U
75-00-3	Chloroethane	50.	U
75-09-2	Methylene Chloride	25.	U
67-64-1	Acetone	50.	U
75-15-0	Carbon Disulfide	25.	U
75-35-4	1,1-Dichloroethene	25.	U
75-34-3	1,1-Dichloroethane	25.	U
156-60-5	1,2-Dichloroethene-trans	25.	U
67-66-3	Chloroform	25 ~~12.~~	~~U~~ U
107-06-2	1,2-Dichloroethane	25.	U
78-93-3	2-Butanone	50.	U J
71-55-6	1,1,1-Trichloroethane	25.	U
56-23-5	Carbon Tetrachloride	25.	U
75-27-4	Bromodichloromethane	25.	U
78-87-5	1,2-Dichloropropane	25.	U
10061-01-5	cis-1,3-Dichloropropene	25.	U
79-01-6	Trichloroethene	52.	
124-48-1	Dibromochloromethane	25.	U
79-00-5	1,1,2-Trichloroethane	25.	U
71-43-2	Benzene	25.	U
10061-02-6	trans-1,3-Dichloropropene	25.	U
75-25-2	Bromoform	25.	U
108-10-1	4-Methyl-2-Pentanone	50.	U
591-78-6	2-Hexanone	50.	U
127-18-4	Tetrachloroethene	25.	U
79-34-5	1,1,2,2-Tetrachloroethane	25.	U J
108-88-3	Toluene	25.	U
108-90-7	Chlorobenzene	25.	U
100-41-4	Ethylbenzene	25.	U
100-42-5	Styrene	25.	U
156-59-2	1,2-Dichloroethene-cis	25.	U J
106-42-3	m,p-Xylenes	25.	U
95-47-6	o-Xylene	25.	U
76-13-1	Freon 113	410.	

Ohm
CB
02/24/03

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DUP DL

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: DUP033001 DL
Sample wt/vol: 1.000 (g/mL) ML Lab File ID: C1178
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/07/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	18.08	40.	J
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Adirondack Environmental Services, Inc.
Experience is the solution
314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

Earth Tech, Inc.
12 Metro Park Road
Albany, New York 12205

Attention: Mark Williams

Adirondack Environmental Services, Inc.
Experience is the solution
314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

TITLE PAGE

On March 31, 2001 sixteen water samples were received by Adirondack Environmental Services, Inc. from Earth Tech at the Wilsonart site. These samples were analyzed for Volatile Organics in accordance with methodology as detailed by the contract. The project was completed on May 10, 2001.

Laura Dunbar
Laboratory Manager

Date: 5/10/01

Adirondack Environmental Services, Inc.
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SAMPLE DATA

SUMMARY PACKAGE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND
ANALYTICAL REQUIREMENT SUMMARY

Customer Sample Code	Laboratory Sample Code	*VOA GC/MS Method	*BNA GC/MS Method	*PCB GC Method	*Pest GC Method	*Herb GC Method	*Metals	*Other CN
MW-3 (1)	010331B-01	X						
MW-8 (1)	010331B-02	X						
MW-1 (2)	010331B-03	X						
MW-2 (2)	010331B-04	X						
MW-3 (2)	010331B-05	X						
MW-4 (2)	010331B-06	X						
MW-5 (2)	010331B-07	X						
MW-6 (2)	010331B-08	X						
MW-7 (2)	010331B-09	X						
MW-8 (2)	010331B-10	X						
MW-9 (2)	010331B-11	X						
MW-3 (3)	010331B-12	X						
MW-8 (3)	010331B-13	X						
DUP 33001	010331B-14	X						
EB 033001	010331B-15	X						
TB 033001	010331B-16	X						

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOLATILE (VOA)
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
010331B-01	WATER	3/30/01	3/31/01	N/A	4/6/01
010331B-02	WATER	3/30/01	3/31/01	N/A	4/6, 4/9/01
010331B-03	WATER	3/30/01	3/31/01	N/A	4/9/01
010331B-04	WATER	3/30/01	3/31/01	N/A	4/9/01
010331B-05	WATER	3/30/01	3/31/01	N/A	4/6/01
010331B-06	WATER	3/30/01	3/31/01	N/A	4/6/01
010331B-07	WATER	3/30/01	3/31/01	N/A	4/6/01
010331B-08	WATER	3/30/01	3/31/01	N/A	4/6/01
010331B-09	WATER	3/30/01	3/31/01	N/A	4/6/01
010331B-10	WATER	3/30/01	3/31/01	N/A	4/6, 4/7/01
010331B-11	WATER	3/30/01	3/31/01	N/A	4/6/01
010331B-12	WATER	3/30/01	3/31/01	N/A	4/6/01
010331B-13	WATER	3/30/01	3/31/01	N/A	4/6, 4/7/01
010331B-14	WATER	3/30/01	3/31/01	N/A	4/6, 4/7/01
010331B-15	WATER	3/30/01	3/31/01	N/A	4/6/01
010331B-16	WATER	3/30/01	3/31/01	N/A	4/6/01

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Case Narrative

Client: Earth Tech – Wilsonart

Case: ETH 0105

SDG: MW-1 (2)

Sample ID	Laboratory Sample ID	Date Received	VTSR	Matrix
MW-3 (1)	010331B-01	03/31/01	10:13	Water
MW-8 (1)	010331B-02	03/31/01	10:13	Water
MW-1 (2)	010331B-03	03/31/01	10:13	Water
MW-2 (2)	010331B-04	03/31/01	10:13	Water
MW-3 (2)	010331B-05	03/31/01	10:13	Water
MW-4 (2)	010331B-06	03/31/01	10:13	Water
MW-5 (2)	010331B-07	03/31/01	10:13	Water
MW-6 (2)	010331B-08	03/31/01	10:13	Water
MW-7 (2)	010331B-09	03/31/01	10:13	Water
MW-8 (2)	010331B-10	03/31/01	10:13	Water
MW-9 (2)	010331B-11	03/31/01	10:13	Water
MW-3 (3)	010331B-12	03/31/01	10:13	Water
MW-8 (3)	010331B-13	03/31/01	10:13	Water
DUP 33001	010331B-14	03/31/01	10:13	Water
EB 033001	010331B-15	03/31/01	10:13	Water
TB 033001	010331B-16	03/31/01	10:13	Water

Volatile Organics

1) The RRF's for the compounds Trichloroethene and 1,1,2,2-Tetrachloroethane were outside the required limits in the initial calibration analyzed on 3/30/01. The RRF's for these compounds were 0.279 and 0.403, respectively. According to the protocol, two volatile organic compounds may exceed the %RSD limit of 20.5 % or the specified RRF as long as the %RSD is less than 40 % and the RRF is above 0.010. The %RSD was below 40 % and the RRF was greater than 0.010 for these compounds.

2) The %D for the compound 1,1,2,2-Tetrachloroethane in the continuing calibration from 4/6/01 was outside the specified level of 25.0 %. The %D for this compound was 27.8 %. The RRF's for the compounds Trichloroethene and 1,1,2,2-Tetrachloroethane were outside the required limits in the continuing calibration analyzed on 4/6/01. The RRF's for these compounds were 0.274 and 0.291, respectively. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % or the specified RRF as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for these compounds.

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3) The %D for the compound 1,1,2,2-Tetrachloroethane in the continuing calibration from 4/7/01 was outside the specified level of 25.0 %. The %D for this compound was 28.8 %. The RRF's for the compounds Trichloroethene and 1,1,2,2-Tetrachloroethane were outside the required limits in the continuing calibration analyzed on 4/7/01. The RRF's for these compounds were 0.280 and 0.287, respectively. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % or the specified RRF as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for these compounds.

4) The %D for the compound Carbon Tetrachloride in the continuing calibration from 4/9/01 was outside the specified level of 25.0 %. The %D for this compound was 31.8 %. The RRF for the compound 1,1,2,2-Tetrachloroethane was outside the required limits in the continuing calibration analyzed on 4/9/01. The RRF for this compound was 0.335. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % or the specified RRF as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for these compounds.

5) The calibration curve for Freon 113 had standard concentrations of 10, 20, 50, 100, 500 ug/L.

6) Sample MW-9 (2) (AES sample number 010331B-11) was used for the matrix spike and the matrix spike duplicate. All recoveries were within required limits.

7) The following samples were diluted prior to analysis due to the high levels of Freon 113 present. Both the undiluted and the diluted analyses are included in the data package.

Client ID	Laboratory ID	Final Dilution
MW-8 (2)	010331B-10	1:2
MW-3 (3)	010331B-12	1:5
MW-8 (3)	010331B-13	1:5
DUP033001	010331B-14	1:5

8) Several samples showed carry-over of non-volatile organic compounds in the library searches for the Tentatively Identified Compounds (TICs). These carry-over compounds are noted on the raw data and are not included with the TICs reported.

9) The column used in Instrument C for analysis was an RTX-502.2, 60 meters long with an internal diameter of 0.32 mm.

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"I certify that this data package is in compliance with the terms and conditions of the protocol, both technically and for completeness, to the best of my knowledge, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Laboratory Manager

Date: 5/10/01

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-1(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1192
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/09/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	2.	J
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	27.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	120.	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-1(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-1(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1192
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/09/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Hydrocarbon	14.84	42.	J
2.		Hydrocarbon	16.75	33.	J
3.		Hydrocarbon	17.51	78.	J
4.		Hydrocarbon	18.99	71.	J
5.		Hydrocarbon	19.89	100.	J
6.		Unknown	20.15	100.	J
7.		Hydrocarbon	20.72	52.	J
8.		Hydrocarbon	21.23	220.	J
9.		Hydrocarbon	21.56	120.	J
10.		Hydrocarbon	22.13	46.	J
11.		Hydrocarbon	22.57	93.	J
12.					
13.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-2(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1193
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/09/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	2.	BJ
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	10.	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-2(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-2(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1193
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/09/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	12.11	100.	J
2.		Unknown	15.11	94.	J
3.		Hydrocarbon	15.61	83.	J
4.		Hydrocarbon	15.90	160.	J
5.		Hydrocarbon	19.08	71.	J
6.		Hydrocarbon	21.76	160.	J
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1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-3(1)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-3(1)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1154
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	8.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	46.	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-3(1)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-3(1)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1154
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		oxygenated compound	17.27	11.	
2.		oxygenated compound	22.11	6.	
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-3(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1175
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	2.	BJ
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	8.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	30.	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-3(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-3(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1175
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3(3)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-3(3)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1165
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	9.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	46.	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-3(3)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-3(3)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1165
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
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29.					
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1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-4(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-4(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1159
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	10.	U

1E

EPA SAMPLE NO.

MW-4(2)

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-4(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1159
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Oxygenated compound	17.29	8.	J
2.		Unknown	22.12	5.	J
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-5(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1160
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	11.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	85.	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-5(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-5(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1160
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-6(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-6(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1168
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	3.	J
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	4.	J
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	23.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	110.	

1E

EPA SAMPLE NO.

MW-6(2)

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-6(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1168
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
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9.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-7(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-7(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1162
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	2.	J
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	4.	J

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-7(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-7(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1162
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	22.70	7.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8(1)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(1)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1155
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	4.	BJ
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	J
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	62.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	490.	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-8(1)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(1)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1155
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN OXYGENATED CMPND	17.29	5.	J
2.	- -	UNKNOWN	19.99	6.	J
3.	- -	UNKNOWN	20.86	50.	J
4.	- -	UNKNOWN HYDROCARBON	21.51	9.	J
5.	- -	UNKNOWN	22.12	20.	J
6.	- -	UNKNOWN	22.27	20.	J
7.	- -	UNKNOWN HYDROCARBON	22.52	30.	J
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
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1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-8(1) DL

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(1) DL
Sample wt/vol: 1.000 (g/mL) ML Lab File ID: C1191
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/09/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50.	U
74-83-9	Bromomethane	50.	U
75-01-4	Vinyl Chloride	50.	U
75-00-3	Chloroethane	50.	U
75-09-2	Methylene Chloride	25.	U
67-64-1	Acetone	50.	U
75-15-0	Carbon Disulfide	25.	U
75-35-4	1,1-Dichloroethene	25.	U
75-34-3	1,1-Dichloroethane	25.	U
156-60-5	1,2-Dichloroethene-trans	25.	U
67-66-3	Chloroform	13.	BJ
107-06-2	1,2-Dichloroethane	25.	U
78-93-3	2-Butanone	50.	U
71-55-6	1,1,1-Trichloroethane	25.	U
56-23-5	Carbon Tetrachloride	25.	U
75-27-4	Bromodichloromethane	25.	U
78-87-5	1,2-Dichloropropane	25.	U
10061-01-5	cis-1,3-Dichloropropene	25.	U
79-01-6	Trichloroethene	55.	
124-48-1	Dibromochloromethane	25.	U
79-00-5	1,1,2-Trichloroethane	25.	U
71-43-2	Benzene	25.	U
10061-02-6	trans-1,3-Dichloropropene	25.	U
75-25-2	Bromoform	25.	U
108-10-1	4-Methyl-2-Pentanone	50.	U
591-78-6	2-Hexanone	50.	U
127-18-4	Tetrachloroethene	25.	U
79-34-5	1,1,2,2-Tetrachloroethane	25.	U
108-88-3	Toluene	25.	U
108-90-7	Chlorobenzene	25.	U
100-41-4	Ethylbenzene	25.	U
100-42-5	Styrene	25.	U
156-59-2	1,2-Dichloroethene-cis	25.	U
106-42-3	m,p-Xylenes	25.	U
95-47-6	o-Xylene	25.	U
76-13-1	Freon 113	510.	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-8(1) DL

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(1) DL
Sample wt/vol: 1.000 (g/mL) ML Lab File ID: C1191
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/09/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1174
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	3.	BJ
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	4.	J
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	49.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	320.	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-8(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1174
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Oxygenated compound	17.33	16.	J
2.					
3.					
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1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-8(2) DL

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(2) DL
Sample wt/vol: 2.500 (g/mL) ML Lab File ID: C1179
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/07/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	20.	U
74-83-9	Bromomethane	20.	U
75-01-4	Vinyl Chloride	20.	U
75-00-3	Chloroethane	20.	U
75-09-2	Methylene Chloride	10.	U
67-64-1	Acetone	20.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	1,2-Dichloroethene-trans	10.	U
67-66-3	Chloroform	6.	BJ
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	20.	U
71-55-6	1,1,1-Trichloroethane	4.	J
56-23-5	Carbon Tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	56.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
10061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	20.	U
591-78-6	2-Hexanone	20.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
156-59-2	1,2-Dichloroethene-cis	10.	U
106-42-3	m,p-Xylenes	10.	U
95-47-6	o-Xylene	10.	U
76-13-1	Freon 113	410.	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-8(2) DL

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(2) DL
Sample wt/vol: 2.500 (g/mL) ML Lab File ID: C1179
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/07/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8(3)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(3)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1166
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	4.	BJ
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	J
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	62.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	500.	E

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-8(3)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(3)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1166
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8(3) DL

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(3) DL
Sample wt/vol: 1.000 (g/mL) ML Lab File ID: C1177
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/07/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50.	U
74-83-9	Bromomethane	50.	U
75-01-4	Vinyl Chloride	50.	U
75-00-3	Chloroethane	50.	U
75-09-2	Methylene Chloride	25.	U
67-64-1	Acetone	50.	U
75-15-0	Carbon Disulfide	25.	U
75-35-4	1,1-Dichloroethene	25.	U
75-34-3	1,1-Dichloroethane	25.	U
156-60-5	1,2-Dichloroethene-trans	25.	U
67-66-3	Chloroform	15.	BJ
107-06-2	1,2-Dichloroethane	25.	U
78-93-3	2-Butanone	50.	U
71-55-6	1,1,1-Trichloroethane	5.	J
56-23-5	Carbon Tetrachloride	25.	U
75-27-4	Bromodichloromethane	25.	U
78-87-5	1,2-Dichloropropane	25.	U
10061-01-5	cis-1,3-Dichloropropene	25.	U
79-01-6	Trichloroethene	61.	
124-48-1	Dibromochloromethane	25.	U
79-00-5	1,1,2-Trichloroethane	25.	U
71-43-2	Benzene	25.	U
10061-02-6	trans-1,3-Dichloropropene	25.	U
75-25-2	Bromoform	25.	U
108-10-1	4-Methyl-2-Pentanone	50.	U
591-78-6	2-Hexanone	50.	U
127-18-4	Tetrachloroethene	25.	U
79-34-5	1,1,2,2-Tetrachloroethane	25.	U
108-88-3	Toluene	25.	U
108-90-7	Chlorobenzene	25.	U
100-41-4	Ethylbenzene	25.	U
100-42-5	Styrene	25.	U
156-59-2	1,2-Dichloroethene-cis	25.	U
106-42-3	m,p-Xylenes	25.	U
95-47-6	o-Xylene	25.	U
76-13-1	Freon 113	520.	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-8(3) DL

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(3) DL
Sample wt/vol: 1.000 (g/mL) ML Lab File ID: C1177
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/07/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-9(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-9(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1164
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	3.	J
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	J
75-34-3	1,1-Dichloroethane	4.	J
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	15.	
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	21.	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-9(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-9(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1164
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Oxygenated compound	17.32	12.	J
2.		Unknown	22.15	12.	J
3.					
4.					
5.					
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1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

DUP

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: DUP033001
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1167
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	3.	BJ
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	4.	J
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	51.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	430.	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

DUP

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: DUP033001
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1167
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
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1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

DUP DL

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: DUP033001 DL
Sample wt/vol: 1.000 (g/mL) ML Lab File ID: C1178
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/07/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50.	U
74-83-9	Bromomethane	50.	U
75-01-4	Vinyl Chloride	50.	U
75-00-3	Chloroethane	50.	U
75-09-2	Methylene Chloride	25.	U
67-64-1	Acetone	50.	U
75-15-0	Carbon Disulfide	25.	U
75-35-4	1,1-Dichloroethene	25.	U
75-34-3	1,1-Dichloroethane	25.	U
156-60-5	1,2-Dichloroethene-trans	25.	U
67-66-3	Chloroform	12.	BJ
107-06-2	1,2-Dichloroethane	25.	U
78-93-3	2-Butanone	50.	U
71-55-6	1,1,1-Trichloroethane	25.	U
56-23-5	Carbon Tetrachloride	25.	U
75-27-4	Bromodichloromethane	25.	U
78-87-5	1,2-Dichloropropane	25.	U
10061-01-5	cis-1,3-Dichloropropene	25.	U
79-01-6	Trichloroethene	52.	
124-48-1	Dibromochloromethane	25.	U
79-00-5	1,1,2-Trichloroethane	25.	U
71-43-2	Benzene	25.	U
10061-02-6	trans-1,3-Dichloropropene	25.	U
75-25-2	Bromoform	25.	U
108-10-1	4-Methyl-2-Pentanone	50.	U
591-78-6	2-Hexanone	50.	U
127-18-4	Tetrachloroethene	25.	U
79-34-5	1,1,2,2-Tetrachloroethane	25.	U
108-88-3	Toluene	25.	U
108-90-7	Chlorobenzene	25.	U
100-41-4	Ethylbenzene	25.	U
100-42-5	Styrene	25.	U
156-59-2	1,2-Dichloroethene-cis	25.	U
106-42-3	m,p-Xylenes	25.	U
95-47-6	o-Xylene	25.	U
76-13-1	Freon 113	410.	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

DUP DL

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: DUP033001 DL
Sample wt/vol: 1.000 (g/mL) ML Lab File ID: C1178
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/07/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	18.08	40.	J
2.					
3.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EB

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: EB033001
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1161
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	10.	U

1E

EPA SAMPLE NO.

EB

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: EB033001
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1161
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: TB033001
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1169
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	4.	J
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	2.	BJ
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	10.	U

1E

EPA SAMPLE NO.

TB

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: TB033001
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1169
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
1	VBLK01	100	101	92		0
2	MW-3(1)	101	104	95		0
3	MW-8(1)	100	99	95		0
4	MW-4(2)	104	104	89		0
5	MW-5(2)	102	103	99		0
6	EB033001	104	98	91		0
7	MW-7(2)	103	100	90		0
8	MW-9(2)	101	102	94		0
9	MW-3(3)	102	102	92		0
10	MW-8(3)	105	98	88		0
11	DUP033001	104	97	93		0
12	MW-6(2)	104	97	94		0
13	TB	107	100	90		0
14	MW-8(2)	104	104	91		0
15	MW-3(2)	103	106	91		0
16	VBLK02	95	98	93		0
17	MW-8(3) DL	97	99	99		0
18	DUP033001 DL	98	104	90		0
19	MW-8(2) DL	98	101	90		0
20	MW-9(2) MS	103	105	97		0
21	MW-9(2) MSD	102	104	94		0
22	VMSB	103	104	94		0
23	VBLK03	91	98	88		0
24	MW-8(1) DL	89	95	89		0
25	MW-1(2)	96	98	90		0
26	MW-2(2)	93	105	95		0
27						
28						
29						
30						

	QC LIMITS
SMC1 (TOL) = Toluene d-8	(88-110)
SMC2 (BFB) = Bromofluorobenzene	(86-115)
SMC3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1

Matrix Spike - EPA Sample No.: MW-9(2)

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	MS CONCENTRATION (UG/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.	5.	57.	104	61-145
Trichloroethene	50.	0.	58.	116	71-120
Benzene	50.	0.	57.	114	76-127
Toluene	50.	0.	56.	112	76-125
Chlorobenzene	50.	0.	57.	114	75-130

COMPOUND	SPIKE ADDED (UG/L)	MSD CONCENTRATION (UG/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.	55.	100	4	14	61-145
Trichloroethene	50.	59.	118	2	14	71-120
Benzene	50.	59.	118	3	11	76-127
Toluene	50.	57.	114	2	13	76-125
Chlorobenzene	50.	58.	116	2	13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS:

3C

WATER VOLATILE MATRIX SPIKE BLANK RECOVERY

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1(2)

Matrix Spike - EPA Sample No.: Blank Level:(Low/Med) Low

COMPOUND	SPIKE ADDED ug/l	SAMPLE CONC. ug/l	MS CONC. ug/l	MS % REC. #	QC LIMITS REC.
1,1-Dichloroethene	50	0	51	102	61-145
Trichloroethene	50	0	55	109	71-120
Benzene	50	0	58	116	76-127
Toluene	50	0	57	113	76-125
Chlorobenzene	50	0	58	117	75-130

Column used to flag recovery values

* Values outside of required QC limits

Spike Recovery 0 out of 5 outside limits

Comments: _____

_____

_____

FORM III VOA

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK01

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1

Lab File ID: CB098 Lab Sample ID: VBLK

Date Analyzed: 04/06/01 Time Analyzed: 10:23

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

Instrument ID: H5970 C

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	MW-3(1)	MW-3(1)	C1154	10:57
2	MW-8(1)	MW-8(1)	C1155	11:27
3	MW-4(2)	MW-4(2)	C1159	13:24
4	MW-5(2)	MW-5(2)	C1160	13:54
5	EB033001	EB033001	C1161	14:23
6	MW-7(2)	MW-7(2)	C1162	14:52
7	MW-9(2)	MW-9(2)	C1164	15:51
8	MW-3(3)	MW-3(3)	C1165	16:21
9	MW-8(3)	MW-8(3)	C1166	16:50
10	DUP033001	DUP033001	C1167	17:19
11	MW-6(2)	MW-6(2)	C1168	17:49
12	TB033001	TB033001	C1169	18:18
13	MW-8(2)	MW-8(2)	C1174	20:45
14	MW-3(2)	MW-3(2)	C1175	21:15
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MENTS:

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

VBLK01

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: VBLK
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: CB098
Level: (low/med) LOW Date Received:
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	2.	J
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	10.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK01

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: VBLK
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: CB098
Level: (low/med) LOW Date Received:
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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4A

EPA SAMPLE NO.

VOLATILE METHOD BLANK SUMMARY

VBLK02

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Lab File ID: CB099 Lab Sample ID: VBLK
Date Analyzed: 04/07/01 Time Analyzed: 12:13
GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N
Instrument ID: H5970 C

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	MW-8(3) DL	MW-8(3) DL	C1177	13:12
2	DUP033001 DL	DUP033001 DL	C1178	13:41
3	MW-8(2) DL	MW-8(2) DL	C1179	14:11
4	MW-9(2) MS	MW-9(2) MS	C1180	14:40
5	MW-9(2) MSD	MW-9(2) MSD	C1181	15:09
6	VMSB	VMSB	C1182	15:39
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COMMENTS:

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EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

VBLK02

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: VBLK
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: CB099
Level: (low/med) LOW Date Received:
% Moisture: not dec._____ Date Analyzed: 04/07/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	2.	J
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	10.	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLK02

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: VBLK
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: CB099
Level: (low/med) LOW Date Received:
% Moisture: not dec._____ Date Analyzed: 04/07/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK03

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1

Lab File ID: CB104 Lab Sample ID: VBLK

Date Analyzed: 04/09/01 Time Analyzed: 12:13

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

Instrument ID: H5970 C

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	MW-8(1) DL	MW-8(1) DL	C1191	12:43
2	MW-1(2)	MW-1(2)	C1192	13:12
3	MW-2(2)	MW-2(2)	C1193	13:41
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EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

VBLK03

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: VBLK
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: CB104
Level: (low/med) LOW Date Received:
% Moisture: not dec._____ Date Analyzed: 04/09/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	2.	J
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	10.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK03

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: VBLK
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: CB104
Level: (low/med) LOW Date Received:
% Moisture: not dec._____ Date Analyzed: 04/09/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Lab File ID (Standard): CS098 Date Analyzed: 04/06/01
Instrument ID: H5970 C Time Analyzed: 09:53
GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA	#	RT	#	IS2(DFB) AREA	#	RT	#	IS3(CBZ) AREA	#	RT	#
	12 HOUR STD	15689.		9.11		135241.		10.59		150387.		16.07	
	UPPER LIMIT	31378.		9.61		270482.		11.09		300774.		16.57	
	LOWER LIMIT	7845.		8.61		67621.		10.09		75194.		15.57	
	EPA SAMPLE NO.												
1	VBLK01	15334.		9.15		115101.		10.59		134854.		16.11	
2	MW-3(1)	14759.		9.13		121882.		10.61		140113.		16.12	
3	MW-8(1)	15954.		9.14		123973.		10.62		144438.		16.14	
4	MW-4(2)	17109.		9.18		124314.		10.62		138442.		16.13	
5	MW-5(2)	16195.		9.18		128197.		10.66		146523.		16.14	
6	EB033001	17071.		9.18		131180.		10.65		148642.		16.13	
7	MW-7(2)	18061.		9.21		128381.		10.65		144430.		16.17	
8	MW-9(2)	18132.		9.17		134208.		10.65		152671.		16.17	
9	MW-3(3)	18043.		9.18		134591.		10.65		146756.		16.17	
10	MW-8(3)	18605.		9.18		129783.		10.66		144620.		16.17	
11	DUP033001	17284.		9.18		128800.		10.66		142131.		16.17	
12	MW-6(2)	15811.		9.21		111330.		10.66		123530.		16.17	
13	TB033001	17886.		9.21		125570.		10.65		140065.		16.17	
14	MW-8(2)	18211.		9.21		114671.		10.66		122677.		16.17	
15	MW-3(2)	18381.		9.21		135041.		10.66		148415.		16.17	
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22													

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Lab File ID (Standard): CS099 Date Analyzed: 04/07/01
Instrument ID: H5970 C Time Analyzed: 11:44
GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA	#	RT	#	IS2(DFB) AREA	#	RT	#	IS3(CBZ) AREA	#	RT	#
	12 HOUR STD	17875.		9.07		150194.		10.55		163038.		16.07	
	UPPER LIMIT	35750.		9.57		300388.		11.05		326076.		16.57	
	LOWER LIMIT	8938.		8.57		75097.		10.05		81519.		15.57	
	EPA SAMPLE NO.												
1	VBLK02	16185.		9.10		123637.		10.58		144512.		16.10	
2	MW-8(3) DL	15350.		9.14		119787.		10.58		135459.		16.10	
3	DUP033001 DL	16504.		9.14		118773.		10.58		134900.		16.10	
4	MW-8(2) DL	15060.		9.14		113439.		10.58		129791.		16.10	
5	MW-9(2) MS	17206.		9.11		136348.		10.58		146485.		16.10	
6	MW-9(2) MSD	16980.		9.14		128785.		10.58		142224.		16.10	
7	VMSB	16665.		9.14		130209.		10.58		140216.		16.10	
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IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Lab File ID (Standard): CS104 Date Analyzed: 04/09/01
Instrument ID: H5970 C Time Analyzed: 11:44
GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	16978.	9.18	154786.	10.62	166947.	16.14
	UPPER LIMIT	33956.	9.68	309572.	11.12	333894.	16.64
	LOWER LIMIT	8489.	8.68	77393.	10.12	83474.	15.64
	EPA SAMPLE NO.						
1	VBLK03	16294.	9.19	132286.	10.63	152519.	16.15
2	MW-8(1) DL	16131.	9.18	128594.	10.66	148829.	16.17
3	MW-1(2)	17250.	9.18	137583.	10.66	155843.	16.14
4	MW-2(2)	22110.	9.18	157950.	10.66	180308.	16.16
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IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

SAMPLE DATA

PACKAGE

Adirondack Environmental Services, Inc.
Experience is the solution
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Case Narrative

Client: Earth Tech – Wilsonart

Case: ETH 0105

SDG: MW-1 (2)

Sample ID	Laboratory Sample ID	Date Received	VTSR	Matrix
MW-3 (1)	010331B-01	03/31/01	10:13	Water
MW-8 (1)	010331B-02	03/31/01	10:13	Water
MW-1 (2)	010331B-03	03/31/01	10:13	Water
MW-2 (2)	010331B-04	03/31/01	10:13	Water
MW-3 (2)	010331B-05	03/31/01	10:13	Water
MW-4 (2)	010331B-06	03/31/01	10:13	Water
MW-5 (2)	010331B-07	03/31/01	10:13	Water
MW-6 (2)	010331B-08	03/31/01	10:13	Water
MW-7 (2)	010331B-09	03/31/01	10:13	Water
MW-8 (2)	010331B-10	03/31/01	10:13	Water
MW-9 (2)	010331B-11	03/31/01	10:13	Water
MW-3 (3)	010331B-12	03/31/01	10:13	Water
MW-8 (3)	010331B-13	03/31/01	10:13	Water
DUP 33001	010331B-14	03/31/01	10:13	Water
EB 033001	010331B-15	03/31/01	10:13	Water
TB 033001	010331B-16	03/31/01	10:13	Water

Volatile Organics

1) The RRF's for the compounds Trichloroethene and 1,1,2,2-Tetrachloroethane were outside the required limits in the initial calibration analyzed on 3/30/01. The RRF's for these compounds were 0.279 and 0.403, respectively. According to the protocol, two volatile organic compounds may exceed the %RSD limit of 20.5 % or the specified RRF as long as the %RSD is less than 40 % and the RRF is above 0.010. The %RSD was below 40 % and the RRF was greater than 0.010 for these compounds.

2) The %D for the compound 1,1,2,2-Tetrachloroethane in the continuing calibration from 4/6/01 was outside the specified level of 25.0 %. The %D for this compound was 27.8 %. The RRF's for the compounds Trichloroethene and 1,1,2,2-Tetrachloroethane were outside the required limits in the continuing calibration analyzed on 4/6/01. The RRF's for these compounds were 0.274 and 0.291, respectively. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % or the specified RRF as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for these compounds.

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3) The %D for the compound 1,1,2,2-Tetrachloroethane in the continuing calibration from 4/7/01 was outside the specified level of 25.0 %. The %D for this compound was 28.8 %. The RRF's for the compounds Trichloroethene and 1,1,2,2-Tetrachloroethane were outside the required limits in the continuing calibration analyzed on 4/7/01. The RRF's for these compounds were 0.280 and 0.287, respectively. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % or the specified RRF as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for these compounds.

4) The %D for the compound Carbon Tetrachloride in the continuing calibration from 4/9/01 was outside the specified level of 25.0 %. The %D for this compound was 31.8 %. The RRF for the compound 1,1,2,2-Tetrachloroethane was outside the required limits in the continuing calibration analyzed on 4/9/01. The RRF for this compound was 0.335. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % or the specified RRF as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for these compounds.

5) The calibration curve for Freon 113 had standard concentrations of 10, 20, 50, 100, 500 ug/L.

6) Sample MW-9 (2) (AES sample number 010331B-11) was used for the matrix spike and the matrix spike duplicate. All recoveries were within required limits.

7) The following samples were diluted prior to analysis due to the high levels of Freon 113 present. Both the undiluted and the diluted analyses are included in the data package.

Client ID	Laboratory ID	Final Dilution
MW-8 (2)	010331B-10	1:2
MW-3 (3)	010331B-12	1:5
MW-8 (3)	010331B-13	1:5
DUP033001	010331B-14	1:5

8) Several samples showed carry-over of non-volatile organic compounds in the library searches for the Tentatively Identified Compounds (TICs). These carry-over compounds are noted on the raw data and are not included with the TICs reported.

9) The column used in Instrument C for analysis was an RTX-502.2, 60 meters long with an internal diameter of 0.32 mm.

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"I certify that this data package is in compliance with the terms and conditions of the protocol, both technically and for completeness, to the best of my knowledge, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Laboratory Manager

Date: 5/10/01

Adirondack Environmental Services, Inc.®
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Albany, New York 12207
518-434-4546/434-0891 FAX

CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:	Address:
Earth Tech	12 metro Park Rd Albany, NY 12205
Send Report To:	**Project Name (Location)**	**Samplers: (Names)**
Mark A. Williams	Wilsonart	P. Wheeler, B. Mongillo
Client Phone No: 518 459-1313	**PO Number:**	**Samplers: (Signature)**
Client Fax No: 518 458-2472		

AES Sample Number	Client Sample Identification & Location (AES #)		Date Sampled	Time A=a.m. P=p.m.	Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
msk ~~A10330 A10101~~	MW-3 (1)	B01	3/30/01	0815 A/P	GW		X	2	EPA 624, Freon 113 +TIC
msk ~~A1102~~ ~~A1003~~	MW-8 (1)	B02		0830 A/P					
msk ~~A1103~~	MW-1 (2)	B03		1035 A/P					
msk ~~A1104~~	MW-2 (2)	B04		0945 A/P					
	MW-3 (2)	B05		1420 A/P					
010331	MW-4 (2)	B06		1130 A/P					
B	MW-5 (2)	B07		1245 A/P					
	MW-6 (2)	B08		1100 A/P					
	MW-7 (2)	B09		1340 A/P					
	MW-8 (2)	B10		1345 A/P					
	MW-9 (2)	B11		1200 A/P					
	MW-3 (3)	B12		1600 A/P					
	MW-8 (3)	B13		1615 A/P					
	DUP 33001	B14		X A/P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

Special Instructions/Remarks
Category B Del.

CC Report To: 3/30/01

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		03/30/01 10:20P
Relinquished by: (Signature)	Received ofr Laboratory by:	Date/Time
03/31/01 1012		3-31-01 10.13

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

Adirondack Environmental Services, Inc.®
314 North Pearl Street
Albany, New York 12207
518-434-4546/434-0891 FAX

CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name: Earth Tech	Address: 12 Metro Park Rd Albany, NY 12205	
Send Report To: Mark A Williams	Project Name (Location) Wilsonart	Samplers: (Names) P. Wheeler, B. Mongillo
Client Phone No: 518-458-1313	PO Number:	Samplers: (Signature)
Client Fax No: 518 458-2472		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
010331 B11	MW-9 MS	3/30/01	1200 A (P)	GW		X	2	EPA 624, Freon 113 + TIC
	MW-9 MSD		1200 A (P)					
B15	EB 033001		1625 A (P)	Lab Water				
B16	TB 033001		— A P	Lab Water			1	
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					

PDW 3/30/01

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks: Category B Del.

Send results to:
Mark Williams
12 metro Park Rd
Albany, NY 12205

Relinquished by: (Signature) P. Wheeler 3/30/01	Received by: (Signature) Mark Williams	Date/Time 03/30/01 10:30P
Relinquished by: (Signature) MAW Mark A. Williams 03/31/01 10:12A	Received for Laboratory by: Susan Hess	Date/Time 3-31-01 10:13

Temperature	Properly Preserved	Received Within Holding Times
Ambient or Chilled	Y N	Y N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

Adirondack Environmental Services
Internal Chain of Custody
AES Project # 010331 B

Sample # 010331 B01 Client Sample ID MW-3 (1) # Bottles: 2

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	M.L	MZ Gunn	3/31/01 17:00				VOA
2	↓	↓	↓				↓

Sample # 010331 B02 Client Sample ID MW-8 (1) # Bottles: 2

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	M.L	MZ Gunn	3/31/01 17:00				VOA
2	↓	↓	↓				↓

Sample # 010331 B03 Client Sample ID MW-1 (2) # Bottles: 2

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
2	M.L	MZ Gunn	3/31 17:00				VOA
	↓	↓	↓				↓

Sample # 010331 B04 Client Sample ID MW-2 (2) # Bottles: 2

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	M.L	MZ Gunn	3/31 17:00				VOA
2	↓	↓	↓				↓

Sample # 010331 B05 Client Sample ID MW-3 (2) # Bottles: 2

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	M.L	MZ Gunn	3/31 17:00				VOA
2	↓	↓	↓				↓

Sample # 010331 B06 Client Sample ID MW-4 (2) # Bottles: 2

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	M.L	MZ Gunn	3/31				

Adirondack Environmental Services
Internal Chain of Custody
AES Project # 010331 B

Sample # 010331 B06 Client Sample ID MW-4 (2) # Bottles: 2

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
2	M.L	[illegible]	3/31 17:00				VOA

Sample # 010331 B07 Client Sample ID MW-5 (2) # Bottles: 2

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	M.L	[illegible]	3/31 17:00				VOA
2	↓	↓					↓

Sample # 010331 B08 Client Sample ID MW-6 (2) # Bottles: 2

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	M.L	[illegible]	3/31 17:00				VOA
2	↓	↓	↓				↓

Sample # 010331 B09 Client Sample ID MW-7 (2) # Bottles: 2

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	M.L	[illegible]	3/31 17:00				VOA
2	↓	↓	↓				↓

Sample # 010331 B10 Client Sample ID MW-8 (2) # Bottles: 2

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	M.L	[illegible]	3/31 17:00				VOA
2	↓	↓	↓				↓

Sample # 010331 B11 Client Sample ID MW-9 (2) # Bottles: 6

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analys
1	M.L	[illegible]	3/31 17:00				VOA
2	↓	↓	↓				↓

Adirondack Environmental Services
Internal Chain of Custody
AES Project # 010331 B

Sample # 010331 B11 Client Sample ID MW-9 (2) # Bottles: 6

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
3	M.L	[illegible]	3/31 17:00				VOA
4	↓	↓	↓				↓
5							
6							

Sample # 010331 B12 Client Sample ID MW-3 (3) # Bottles: 2

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	M.L	[illegible]	3/31 17:00				VOA
2	↓	↓	↓				↓

Sample # 010331 B13 Client Sample ID MW-8 (3) # Bottles: 2

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	M.L	[illegible]	3/31 17:00				VOA
2	↓	↓	↓				↓

Sample # 010331 B14 Client Sample ID DUP 33001 # Bottles: 2

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	M.L	[illegible]	3/31 17:00				VOA
2	↓	↓	↓				↓

Sample # 010331 B15 Client Sample ID EB 033001 # Bottles: 2

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	M.L	[illegible]	3/31 17:00				VOA
2	↓	↓	↓				↓

Adirondack Environmental Services
Internal Chain of Custody
AES Project # 010331 B

Sample # 010331 B16 Client Sample ID TB 033001 # Bottles: 1

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	M. L	[signature]	3/31 17:00				VOA

***** End Chain of Custody Form *****

VOLATILE ORGANICS

ANALYSIS

QC

SUMMARY

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
1	VBLK01	100	101	92		0
2	MW-3(1)	101	104	95		0
3	MW-8(1)	100	99	95		0
4	MW-4(2)	104	104	89		0
5	MW-5(2)	102	103	99		0
6	EB033001	104	98	91		0
7	MW-7(2)	103	100	90		0
8	MW-9(2)	101	102	94		0
9	MW-3(3)	102	102	92		0
10	MW-8(3)	105	98	88		0
11	DUP033001	104	97	93		0
12	MW-6(2)	104	97	94		0
13	TB	107	100	90		0
14	MW-8(2)	104	104	91		0
15	MW-3(2)	103	106	91		0
16	VBLK02	95	98	93		0
17	MW-8(3) DL	97	99	99		0
18	DUP033001 DL	98	104	90		0
19	MW-8(2) DL	98	101	90		0
20	MW-9(2) MS	103	105	97		0
21	MW-9(2) MSD	102	104	94		0
22	VMSB	103	104	94		0
23	VBLK03	91	98	88		0
24	MW-8(1) DL	89	95	89		0
25	MW-1(2)	96	98	90		0
26	MW-2(2)	93	105	95		0
27						
28						
29						
30						

	QC LIMITS
SMC1 (TOL) = Toluene d-8	(88-110)
SMC2 (BFB) = Bromofluorobenzene	(86-115)
SMC3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1

Matrix Spike - EPA Sample No.: MW-9(2)

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	MS CONCENTRATION (UG/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.	5.	57.	104	61-145
Trichloroethene	50.	0.	58.	116	71-120
Benzene	50.	0.	57.	114	76-127
Toluene	50.	0.	56.	112	76-125
Chlorobenzene	50.	0.	57.	114	75-130

COMPOUND	SPIKE ADDED (UG/L)	MSD CONCENTRATION (UG/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.	55.	100	4	14	61-145
Trichloroethene	50.	59.	118	2	14	71-120
Benzene	50.	59.	118	3	11	76-127
Toluene	50.	57.	114	2	13	76-125
Chlorobenzene	50.	58.	116	2	13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS:

3C

WATER VOLATILE MATRIX SPIKE BLANK RECOVERY

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1(2)

Matrix Spike - EPA Sample No.: Blank Level:(Low/Med) Low

COMPOUND	SPIKE ADDED ug/l	SAMPLE CONC. ug/l	MS CONC. ug/l	MS % REC. #	QC LIMITS REC.
1,1-Dichloroethene	50	0	51	102	61-145
Trichloroethene	50	0	55	109	71-120
Benzene	50	0	58	116	76-127
Toluene	50	0	57	113	76-125
Chlorobenzene	50	0	58	117	75-130

Column used to flag recovery values

* Values outside of required QC limits

Spike Recovery 0 out of 5 outside limits

Comments: _____

_____

_____

FORM III VOA

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK01

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1

Lab File ID: CB098 Lab Sample ID: VBLK

Date Analyzed: 04/06/01 Time Analyzed: 10:23

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

Instrument ID: H5970 C

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	MW-3(1)	MW-3(1)	C1154	10:57
2	MW-8(1)	MW-8(1)	C1155	11:27
3	MW-4(2)	MW-4(2)	C1159	13:24
4	MW-5(2)	MW-5(2)	C1160	13:54
5	EB033001	EB033001	C1161	14:23
6	MW-7(2)	MW-7(2)	C1162	14:52
7	MW-9(2)	MW-9(2)	C1164	15:51
8	MW-3(3)	MW-3(3)	C1165	16:21
9	MW-8(3)	MW-8(3)	C1166	16:50
10	DUP033001	DUP033001	C1167	17:19
11	MW-6(2)	MW-6(2)	C1168	17:49
12	TB033001	TB033001	C1169	18:18
13	MW-8(2)	MW-8(2)	C1174	20:45
14	MW-3(2)	MW-3(2)	C1175	21:15
15				
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19				
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COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK02

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Lab File ID: CB099 Lab Sample ID: VBLK
Date Analyzed: 04/07/01 Time Analyzed: 12:13
GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N
Instrument ID: H5970 C

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	MW-8(3) DL	MW-8(3) DL	C1177	13:12
2	DUP033001 DL	DUP033001 DL	C1178	13:41
3	MW-8(2) DL	MW-8(2) DL	C1179	14:11
4	MW-9(2) MS	MW-9(2) MS	C1180	14:40
5	MW-9(2) MSD	MW-9(2) MSD	C1181	15:09
6	VMSB	VMSB	C1182	15:39
7				
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COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK03

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1

Lab File ID: CB104 Lab Sample ID: VBLK

Date Analyzed: 04/09/01 Time Analyzed: 12:13

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

Instrument ID: H5970 C

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	MW-8(1) DL	MW-8(1) DL	C1191	12:43
2	MW-1(2)	MW-1(2)	C1192	13:12
3	MW-2(2)	MW-2(2)	C1193	13:41
4				
5				
6				
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COMMENTS:

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1

Lab File ID: CT089 BFB Injection Date: 03/30/01

Instrument ID.: H5970 C BFB Injection Time: 11:29

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	36.8
75	30.0 - 60.0% of mass 95	30.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.5
173	Less than 2.0% of mass 174	.0 (.0)1
174	50.0 - 120.0% of mass 95	51.7
175	5.0 - 9.0 % of mass 174	4.6 (8.9)1
176	95.0 - 101.0% of mass 174	49.2 (95.2)1
177	5.0 - 9.0% of mass 176	3.6 (7.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD010	VSTD010	CS089	03/30/01	11:52
2	VSTD020	VSTD020	CS090	03/30/01	12:22
3	VSTD050	VSTD050	CS091	03/30/01	12:51
4	VSTD100	VSTD100	CS092	03/30/01	13:21
5	VSTD200	VSTD200	CS093	03/30/01	13:50
6					
7					
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19					
20					
21					
22					

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1

Lab File ID: CT098 BFB Injection Date: 04/06/01

Instrument ID.: H5970 C BFB Injection Time: 09:32

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	32.7
75	30.0 - 60.0% of mass 95	50.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	.0 (.0)1
174	50.0 - 120.0% of mass 95	51.4
175	5.0 - 9.0 % of mass 174	4.6 (8.9)1
176	95.0 - 101.0% of mass 174	49.5 (96.3)1
177	5.0 - 9.0% of mass 176	3.3 (6.7)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD050	VSTD050	CS098	04/06/01	09:53
2	VBLK01	VBLK01	CB098	04/06/01	10:23
3	MW-3(1)	MW-3(1)	C1154	04/06/01	10:57
4	MW-8(1)	MW-8(1)	C1155	04/06/01	11:27
5	MW-4(2)	MW-4(2)	C1159	04/06/01	13:24
6	MW-5(2)	MW-5(2)	C1160	04/06/01	13:54
7	EB033001	EB033001	C1161	04/06/01	14:23
8	MW-7(2)	MW-7(2)	C1162	04/06/01	14:52
9	MW-9(2)	MW-9(2)	C1164	04/06/01	15:51
10	MW-3(3)	MW-3(3)	C1165	04/06/01	16:21
11	MW-8(3)	MW-8(3)	C1166	04/06/01	16:50
12	DUP033001	DUP033001	C1167	04/06/01	17:19
13	MW-6(2)	MW-6(2)	C1168	04/06/01	17:49
14	TB033001	TB033001	C1169	04/06/01	18:18
15	MW-8(2)	MW-8(2)	C1174	04/06/01	20:45
16	MW-3(2)	MW-3(2)	C1175	04/06/01	21:15
17					
18					
19					
20					
21					
22					

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1

Lab File ID: CT099 BFB Injection Date: 04/07/01

Instrument ID.: H5970 C BFB Injection Time: 11:18

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	33.4
75	30.0 - 60.0% of mass 95	58.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	.0 (.0)1
174	50.0 - 120.0% of mass 95	50.6
175	5.0 - 9.0 % of mass 174	4.4 (8.7)1
176	95.0 - 101.0% of mass 174	50.3 (99.4)1
177	5.0 - 9.0% of mass 176	3.3 (6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD050	VSTD050	CS099	04/07/01	11:44
2	VBLK02	VBLK02	CB099	04/07/01	12:13
3	MW-8(3) DL	MW-8(3) DL	C1177	04/07/01	13:12
4	DUP033001 DL	DUP033001 DL	C1178	04/07/01	13:41
5	MW-8(2) DL	MW-8(2) DL	C1179	04/07/01	14:11
6	MW-9(2) MS	MW-9(2) MS	C1180	04/07/01	14:40
7	MW-9(2) MSD	MW-9(2) MSD	C1181	04/07/01	15:09
8	VMSB	VMSB	C1182	04/07/01	15:39
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1

Lab File ID: CT100 BFB Injection Date: 04/09/01

Instrument ID.: H5970 C BFB Injection Time: 09:20

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	25.0
75	30.0 - 60.0% of mass 95	56.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.4
173	Less than 2.0% of mass 174	.0 (.0)1
174	50.0 - 120.0% of mass 95	76.6
175	5.0 - 9.0 % of mass 174	6.4 (8.4)1
176	95.0 - 101.0% of mass 174	73.0 (95.3)1
177	5.0 - 9.0% of mass 176	5.3 (7.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	F010	F010	CS100	04/09/01	09:46
2	F020	F020	CS101	04/09/01	10:16
3	F050	F050	CS102	04/09/01	10:45
4	F100	F100	CS103	04/09/01	11:15
5	VSTD050	VSTD050	CS104	04/09/01	11:44
6	VBLK03	VBLK03	CB104	04/09/01	12:13
7	MW-8(1) DL	MW-8(1) DL	C1191	04/09/01	12:43
8	MW-1(2)	MW-1(2)	C1192	04/09/01	13:12
9	MW-2(2)	MW-2(2)	C1193	04/09/01	13:41
10					
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8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Lab File ID (Standard): CS098 Date Analyzed: 04/06/01
Instrument ID: H5970 C Time Analyzed: 09:53
GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	15689.	9.11	135241.	10.59	150387.	16.07
	UPPER LIMIT	31378.	9.61	270482.	11.09	300774.	16.57
	LOWER LIMIT	7845.	8.61	67621.	10.09	75194.	15.57
	EPA SAMPLE NO.						
1	VBLK01	15334.	9.15	115101.	10.59	134854.	16.11
2	MW-3(1)	14759.	9.13	121882.	10.61	140113.	16.12
3	MW-8(1)	15954.	9.14	123973.	10.62	144438.	16.14
4	MW-4(2)	17109.	9.18	124314.	10.62	138442.	16.13
5	MW-5(2)	16195.	9.18	128197.	10.66	146523.	16.14
6	EB033001	17071.	9.18	131180.	10.65	148642.	16.13
7	MW-7(2)	18061.	9.21	128381.	10.65	144430.	16.17
8	MW-9(2)	18132.	9.17	134208.	10.65	152671.	16.17
9	MW-3(3)	18043.	9.18	134591.	10.65	146756.	16.17
10	MW-8(3)	18605.	9.18	129783.	10.66	144620.	16.17
11	DUP033001	17284.	9.18	128800.	10.66	142131.	16.17
12	MW-6(2)	15811.	9.21	111330.	10.66	123530.	16.17
13	TB033001	17886.	9.21	125570.	10.65	140065.	16.17
14	MW-8(2)	18211.	9.21	114671.	10.66	122677.	16.17
15	MW-3(2)	18381.	9.21	135041.	10.66	148415.	16.17
16							
17							
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20							
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22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Lab File ID (Standard): CS099 Date Analyzed: 04/07/01
Instrument ID: H5970 C Time Analyzed: 11:44
GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	17875.	9.07	150194.	10.55	163038.	16.07
	UPPER LIMIT	35750.	9.57	300388.	11.05	326076.	16.57
	LOWER LIMIT	8938.	8.57	75097.	10.05	81519.	15.57
	EPA SAMPLE NO.						
1	VBLK02	16185.	9.10	123637.	10.58	144512.	16.10
2	MW-8(3) DL	15350.	9.14	119787.	10.58	135459.	16.10
3	DUP033001 DL	16504.	9.14	118773.	10.58	134900.	16.10
4	MW-8(2) DL	15060.	9.14	113439.	10.58	129791.	16.10
5	MW-9(2) MS	17206.	9.11	136348.	10.58	146485.	16.10
6	MW-9(2) MSD	16980.	9.14	128785.	10.58	142224.	16.10
7	VMSB	16665.	9.14	130209.	10.58	140216.	16.10
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IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Lab File ID (Standard): CS104 Date Analyzed: 04/09/01
Instrument ID: H5970 C Time Analyzed: 11:44
GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	16978.	9.18	154786.	10.62	166947.	16.14
	UPPER LIMIT	33956.	9.68	309572.	11.12	333894.	16.64
	LOWER LIMIT	8489.	8.68	77393.	10.12	83474.	15.64
	EPA SAMPLE NO.						
1	VBLK03	16294.	9.19	132286.	10.63	152519.	16.15
2	MW-8(1) DL	16131.	9.18	128594.	10.66	148829.	16.17
3	MW-1(2)	17250.	9.18	137583.	10.66	155843.	16.14
4	MW-2(2)	22110.	9.18	157950.	10.66	180308.	16.16
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IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

Volatile Organics IDL

Date Performed: 8/21/00

Parameter	Conc 1 CIDL1	Conc 2 CIDL2	Conc 3 CIDL3	Conc 4 CIDL4	Conc 5 CIDL5	Conc 6 CIDL6	Conc 7 CIDL7	SD	IDL
Chloromethane	20.77	23.31	20.65	20.23	21.21	23.99		1.562	5.257
Bromomethane	19.30	20.97	19.99	18.51	19.67			0.905	3.390
Vinyl Chloride	19.56	21.20	19.74	20.22	20.54	20.73	21.64	0.751	2.359
Chloroethane	21.19	20.12	20.35	22.68	20.10	21.72	23.17	1.246	3.917
Methylene Chloride	21.52	23.29	22.02	22.41	22.04	21.13	23.16	0.797	2.506
Acetone	25.54	25.52	21.76	27.05	26.11	24.71	25.73	1.674	5.263
Trichlorofluoromethane	20.46	21.09	20.61	20.13	22.16	21.02	22.25	0.821	2.580
Carbon Disulfide	20.07	21.79	20.65	21.26	21.19	20.28	21.36	0.625	1.963
1,1-Dichloroethene	19.39	21.41		22.47	23.52	20.68	22.27	1.460	4.912
1,1-Dichloroethane	19.87	22.08	19.70	21.73	22.65	23.02	22.40	1.329	4.178
trans-1,2-Dichloroethene	19.74	22.08	21.50	21.19	22.26	21.71	23.04	1.031	3.240
cis-1,2-Dichloroethene	18.86	20.20	19.27	19.12	20.58	19.62	19.99	0.623	1.960
Chloroform	18.95	20.05	19.27	19.72	21.07	19.45	20.36	0.720	2.263
1,2 Dichloroethane	19.98	20.88	20.01	20.25	21.24	20.45	20.99	0.499	1.569
2-Butanone	20.43	22.34	20.29	22.13	20.38			1.027	3.849
1,1,1-Trichloroethane	20.17	20.25	19.58	19.78	20.91	19.79	20.03	0.438	1.377
Carbon Tetrachloride	18.52	18.56	19.21	18.78	19.10	19.33	19.57	0.400	1.257
Vinyl Acetate	21.61	22.50	19.54	18.71				1.763	8.006
Bromodichloromethane	20.68	20.44	21.00	19.62	20.88	20.59	20.86	0.465	1.461
1,2-Dichloropropane	20.56	20.74	21.35	20.90	21.98	20.75	20.19	0.582	1.829
cis-1,3-Dichloropropene	18.44	16.93	18.78	17.65	17.80	17.92	18.16	0.595	1.871
Trichloroethene	20.96	20.99	21.09	20.52	22.18	21.11	21.52	0.524	1.647
Dibromochloromethane	20.77	19.34	20.14	19.72	20.01	20.13	19.72	0.451	1.416
1,1,2-Trichloroethane	21.08	20.96	21.13	21.40	22.03	21.41	21.10	0.362	1.139
Benzene	20.66	20.74	20.71	20.26	20.48	20.57	20.47	0.168	0.528
trans-1,3-Dichloropropene	17.89	16.95	18.18	17.81	17.80	18.34	17.76	0.441	1.385
2-Chloroethyl vinyl ether	16.16	19.06	19.51	18.84	19.13	18.86	18.55	1.111	3.491
Bromoform	20.66	18.40	19.74	19.91	20.55	20.91	20.20	0.839	2.637
2-Hexanone	19.52	19.13	20.94	20.60	20.37	20.38	19.38	0.693	2.178
4-Methyl-2-pentanone	17.92	18.08	18.62	18.00	19.10	18.65	20.04	0.754	2.370
Tetrachloroethene	18.98	20.90	20.22	19.71	20.03	20.12	20.63	0.625	1.965
1,1,2,2-Tetrachloroethane	20.76	20.71	21.19	20.66	19.62	22.33	20.62	0.810	2.545
Toluene	19.45	20.51	20.34	20.15	20.55	20.17	20.33	0.370	1.162
Chlorobenzene	20.90	20.24	21.11	20.57	21.64	20.89	20.47	0.463	1.456
Ethylbenzene	18.47	18.67	18.54	18.72	19.63	18.35	19.88	0.605	1.901
Styrene	18.97	19.24	19.99	19.10	18.79	19.12	18.89	0.397	1.248
m&p-Xylene	56.85	57.02	57.82	56.97	58.86	58.49	59.34	1.008	3.167
o-Xylene	20.09	19.58	19.71	18.86	18.66	19.19	18.93	0.520	1.634
1,3-Dichlorobenzene	20.12	19.70	20.31	19.46	20.72	21.54	20.42	0.686	2.156
1,4-Dichlorobenzene	19.83	18.98	19.97	18.86	19.71	20.47	20.52	0.652	2.050
1,2-Dichlorobenzene	20.25	20.22	20.56	19.28	20.86	21.70	20.95	0.752	2.363

SAMPLE

DATA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-1(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1192
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/09/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	2.	J
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	27.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	120.	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-1(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-1(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1192
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/09/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Hydrocarbon	14.84	42.	J
2.		Hydrocarbon	16.75	33.	J
3.		Hydrocarbon	17.51	78.	J
4.		Hydrocarbon	18.99	71.	J
5.		Hydrocarbon	19.89	100.	J
6.		Unknown	20.15	100.	J
7.		Hydrocarbon	20.72	52.	J
8.		Hydrocarbon	21.23	220.	J
9.		Hydrocarbon	21.56	120.	J
10.		Hydrocarbon	22.13	46.	J
11.		Hydrocarbon	22.57	93.	J
12.					
13.					
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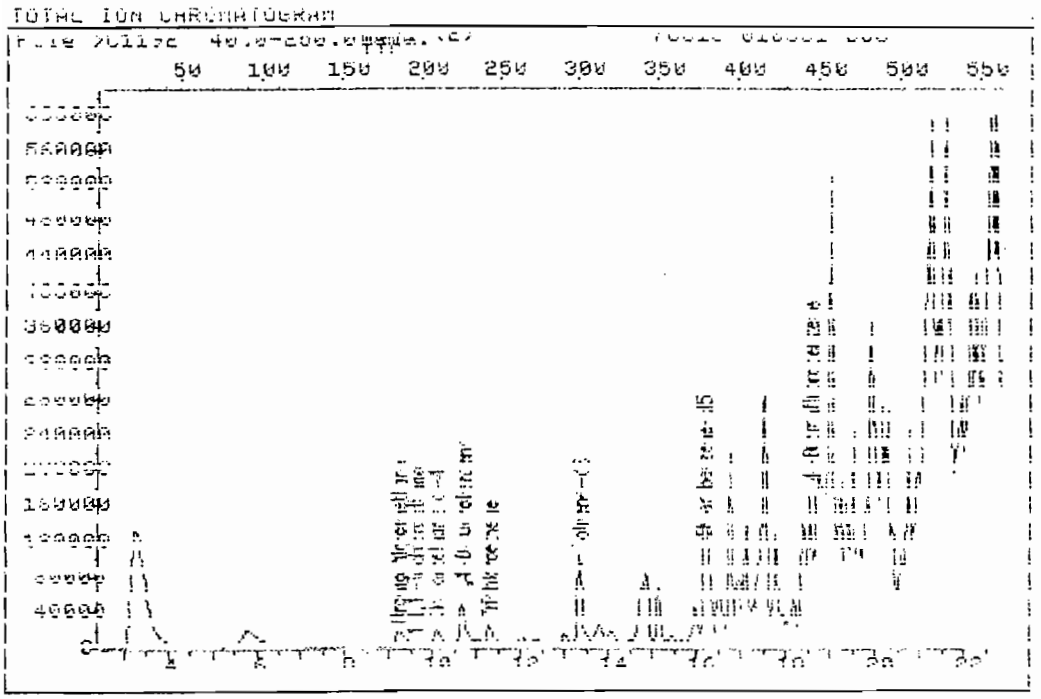
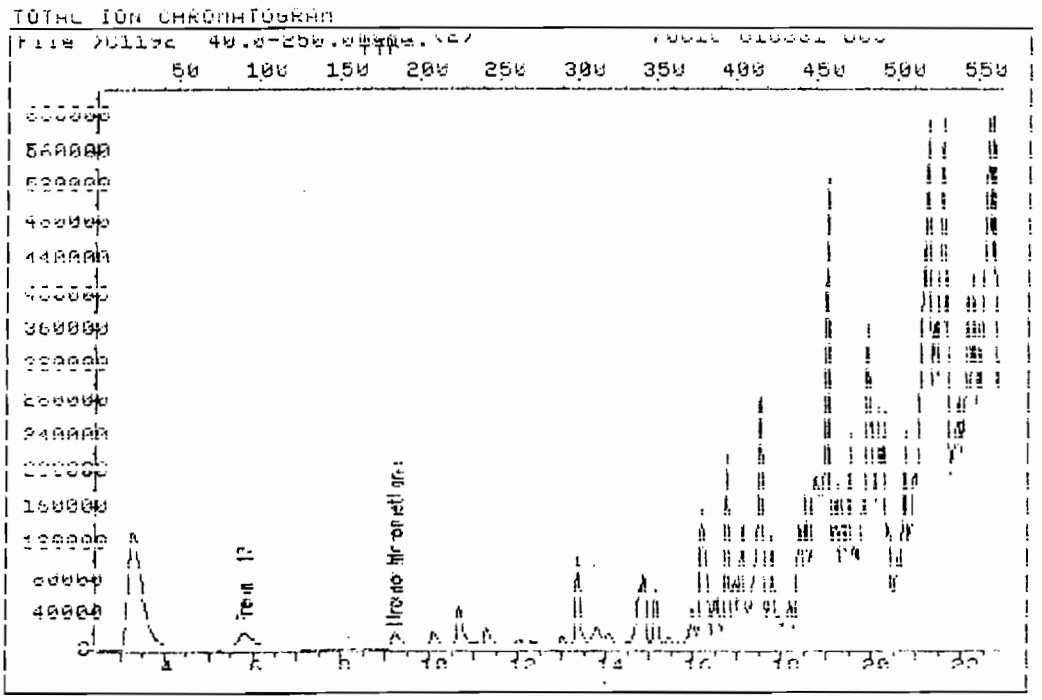


Data File: >C:\192::\> Quant Output File: ^C:\192::\Q\
Name: mw-1 (2) Instrument ID: >001 <
Misc: 20010 010531 bb>

Id File: \\S91\.::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000410 08:51 Last Qual Time: **:-09 1?:-4

Operator ID: MANAGER
Quant Time : 010409 13: >
Injected at: **0409 13:12



Data File: >C:\192::03 Quant Output File: 'C:\192::QT
Name: mw-1 (2) Instrument ID: >101 L
Misc: 7001c 010331 b03

Id File: !DF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Cal Time: **-09 11:-?

Operator ID: MANAGER
Quant Time : 010423 11:-?
Injected at: **0409 13:12

Operator ID: MANAGER Quant Rev: 7 Quant Time: 011-89 15:5n
Output File: ^C1192::QT Injected at: **14N9 13:12
Data File: >C1192::D3 Dilution Factor: 1.0000
Name: MW-1 (2) Instrument ID: 7001 C
Misc: 7001c 010331 b03

ID File: IDS91C::MT
Title: HP GUA Continuing Calibration Standa n
Last Calibration: 00AR10 0R:51 Last Qcal Time: **14N9 11:44

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	*Bromochloromethane	9.18	128.0	12750	50.00	ug	
19)	1,2-Dichloroethane-d4	10.04	65.0	8N516	44.89	UG	93
22)	*1,4-Difluorobenzene	10.66	114.0	13258>	50.00	ug	
23)	1,1,1-Trichloroethane	9.57	97.0	>0000	2.14	UG	84
29)	Trichloroethene	11.27	130.0	2513N	22.45	ug	
36)	*Chlorobenzene-d5	16.14	117.0	195843	50.00	UG	
42)	Toluene d-8	13.92	98.0	2NA039	47.94	ug	
46)	Bromofluorobenzene	18.52	95.0	8A266M	48.99	UG	69

* Compound is ISTD

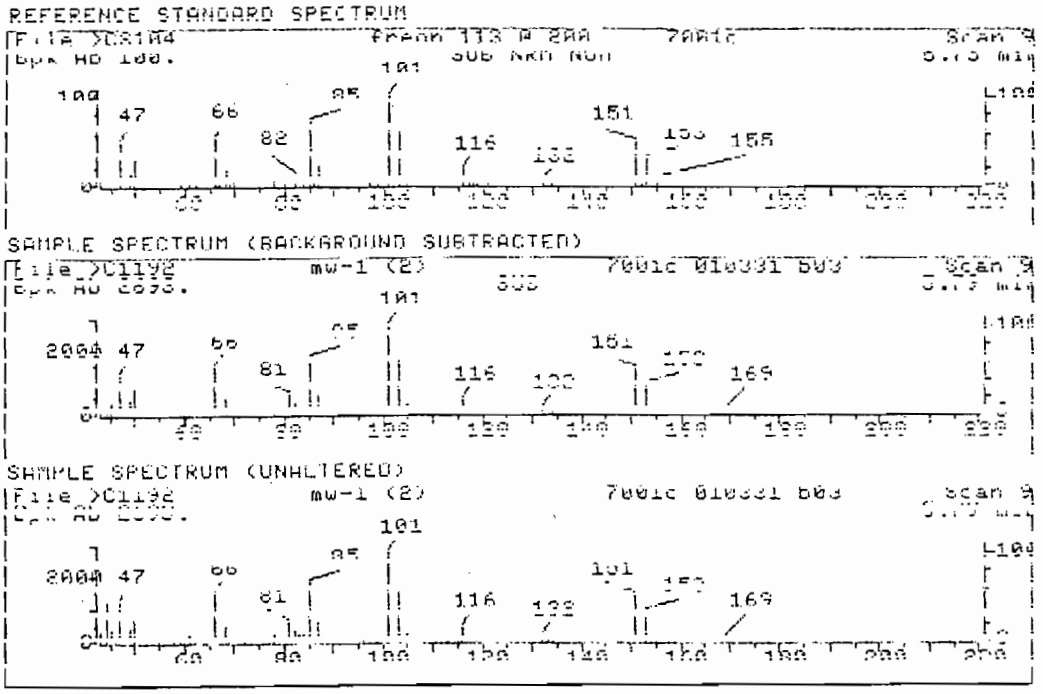
QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 01[illegible]23 11:42
Output File: 'C1192::QT Injected at: **0409 13:12
Data File: >C1192::03 Dilution Factor: 1.000000
Name: mw-1 (2) Instrument ID: 7001 C
Misc: 7001c 010331 b03

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **0409 10:45

Compound	R.T.	Q ion	Area	Conc	Units	q
1) *Bromochloromethane	9.18	128.0	17212	50.00	UG	[illegible]
2) Freon 113	5.29	101.0	6[illegible]33	1[illegible].04	UG	94

* Compound is ISTD

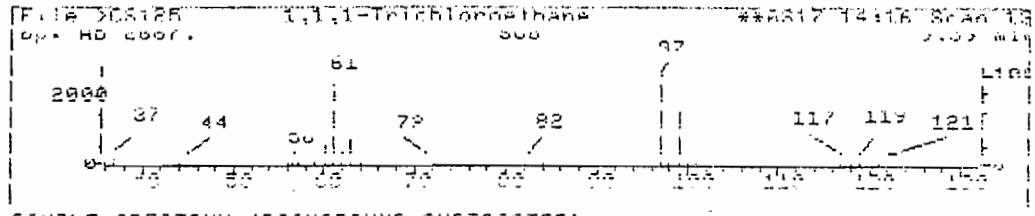


Data File: >C:\192::03
Name: mw-1 (2)
Misc: 7001c 010331 b03
Quant Time: 010423 11:42
Injected at: **0409 13:12
Last Qcal Time: **0409 10:45

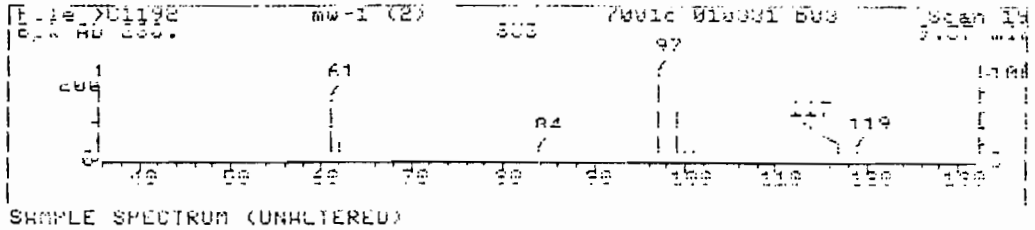
Quant Output File: 'C:\192::QT
Instrument ID: :\01
Quant ID File: :\F113::MT
Last Calibration: :

Compound No : 2
Compound Name : Freon 1:>
Scan Number : 92
Retention Time: 5.29 min.
Quant Ion : 101.0
Area : 680:>
Concentration : 117.04 UG
q-value : 94

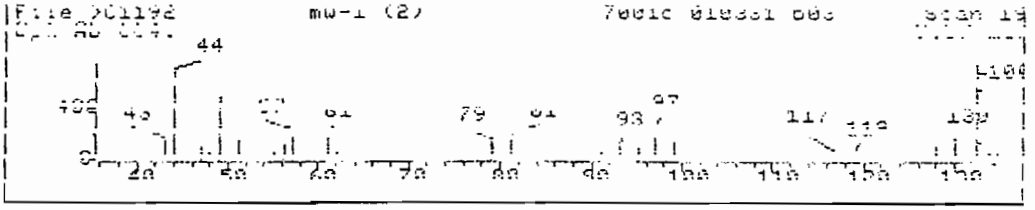
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >C:\192::03 Quant Output File: ^C:\192::Q\

Name: mw-1 (2) Instrument ID: ...01 F.

Misc: 7001c 010331 b03

Quant Time: 010409 13:56 Quant ID File: [...91C:::.\

Injected at: **0409 13:12 Last Calibration: 010408\0 08:2\

Last Qcal Time: **0409 11:44

Compound No : 23

Compound Name : 1,1,1-Trichloroethane

Scan Number : 197

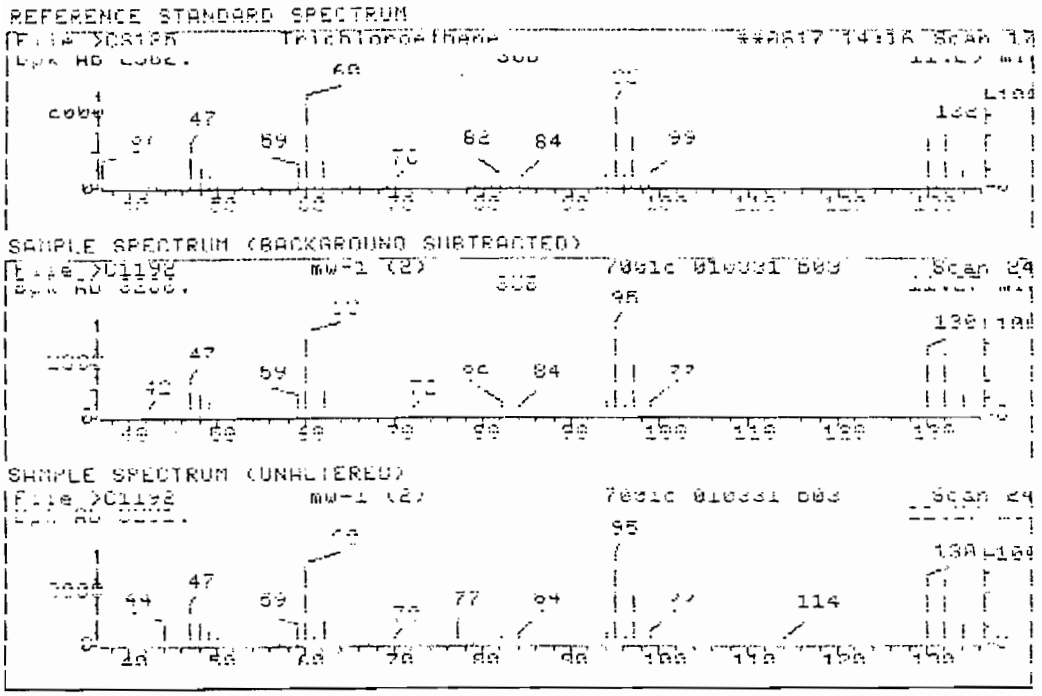
Retention Time: 9.57 min.

Quant Ion : 97.0

Area : 3[...

Concentration : 2.14 UG

q-value : 84



Data File: >C1192::03
Name: mw-1 (2)
Misc: 700ic 010531 b03
Quant Time: 010409 13:56
Injected at: **0409 13:12
Last Qcal Time: **0409 11:44

Quant Output File: ^C1192::QT
Instrument ID: >001
Quant ID File: [illegible]
Last Calibration: [illegible]

Compound No : 29
Compound Name : Trichloroethene
Scan Number : 244
Retention Time: 11.27 min.
Quant Ion : 130.0
Area : 231[illegible]
Concentration : 27.45 UG
q-value : 95

MS data file header from : >C:\192::03

Sample: mw-1 (2) Operator: MANAGER SUPER GRP. 4/0>/01 1>: /
Misc : 7001c 010>51 b03
Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7001 C
Method file: METH03 Tuning file: MT>>03 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	>>0.	>>0.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	.1	0.0	.2	0.0

>C:\192 mw-1 (2) 7000c 010>51 b0>
40.01 250.0 CLP 70C
Upslope: .2000 Area Reject: 54761. Max Peaks: 12 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File 1C:\192 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	3.23	14	21	59	131466	32?=>44	>190187	56.93	11.>>6
2	14.84	329	34>	34R	81R49	1182886	10?4561I	19.18	3.83R
3	16.75	393	396	398	196IA1	1IIIII57	854>>8	15.?5	3.05?
4	17.51	411	41?	421	24?II70	2?>?287	2II668?	35.99	7.204
5	18.99	455	458	462	41>>64	3582679	183>?62	5?.?2	6.549
6	19.89	477	483	488	266083	49?>992	26:1816	46.61	9.>50
7	20.15	488	490	499	211224	4074?I0	26? R56	47.?5	9.5 n
8	20.72	499	506	508	185245	24?8616	1>>>783	23.84	4.?72
9	21.?3	509	5?0	523	45?747	9682??4	56II>>33	100.0I	20.I 5
10	21.56	526	529	535	395158	7II?135	3?II45I9	5?.19	11.447
11	22.13	>41	>45	>46	18?828	3568425	11??936	21.0?	4.? R
12	22.57	553	557	559	304189	6209?48	2414567	43.09	8.625

Sum of corrected areas: 2?994R8.

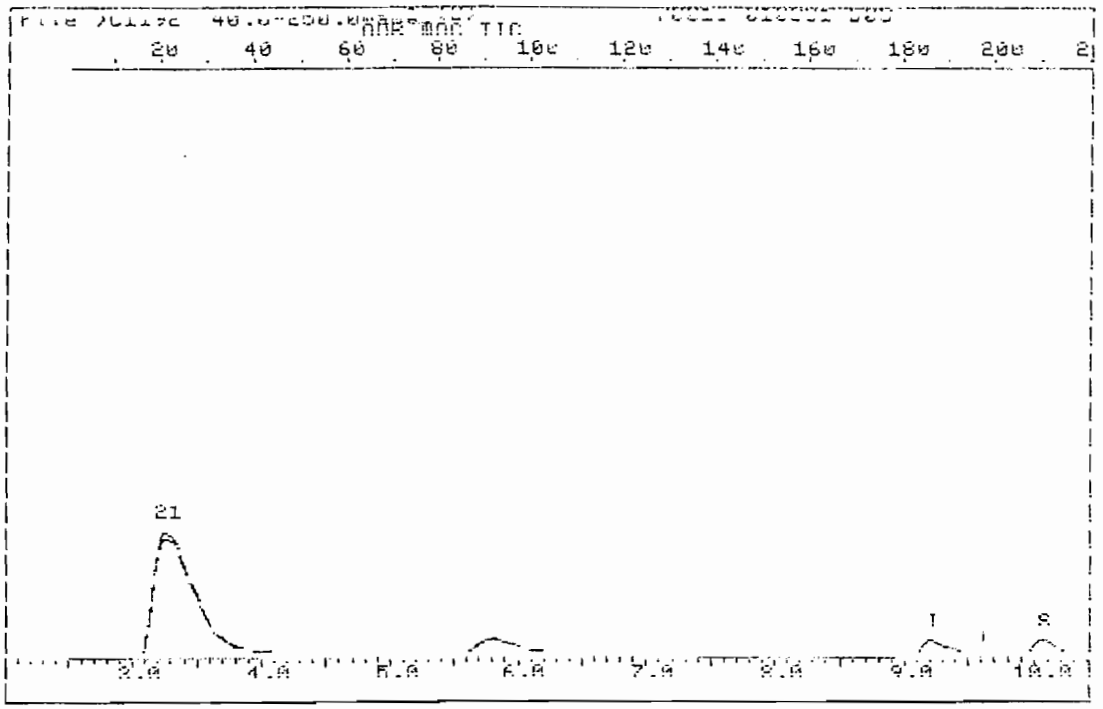
Summary of Unknowns PBM Library Search and Quantitation

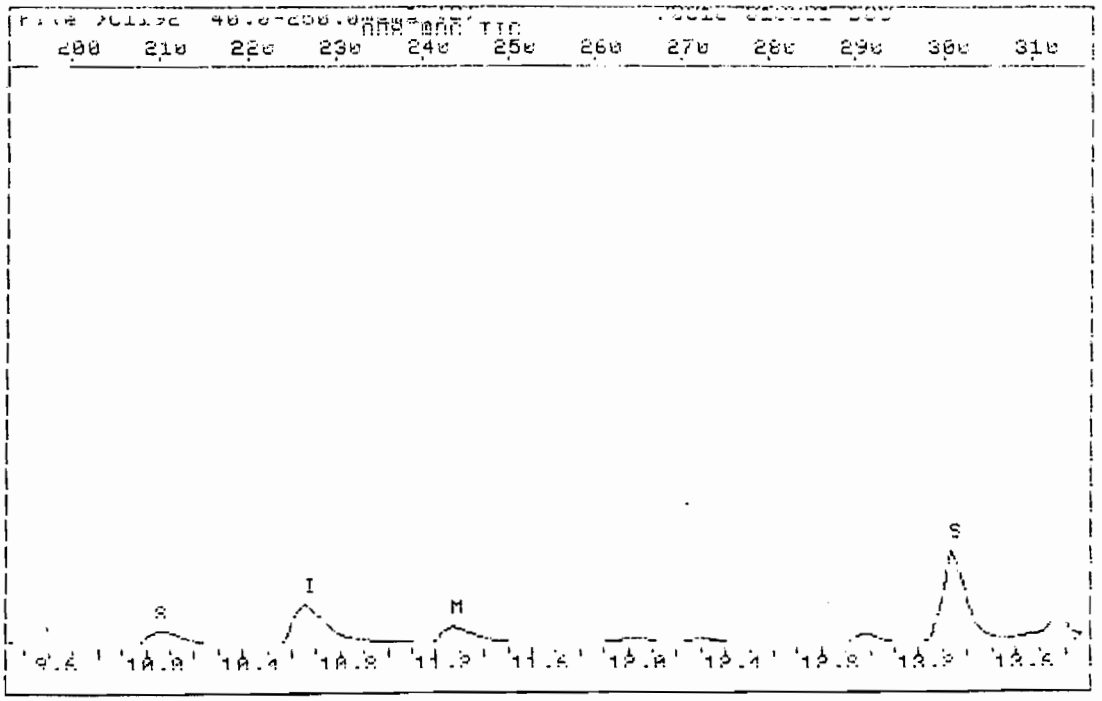
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	542606.	9.18	2.51 - 9.92
2	50.0	54?606.	10.66	9.92 - 13.-I
3	50.0	1295164.	16.14	13.40 - 22.86

Dilution Factor = 1.I0 This sample was 1000.I0 g or mL

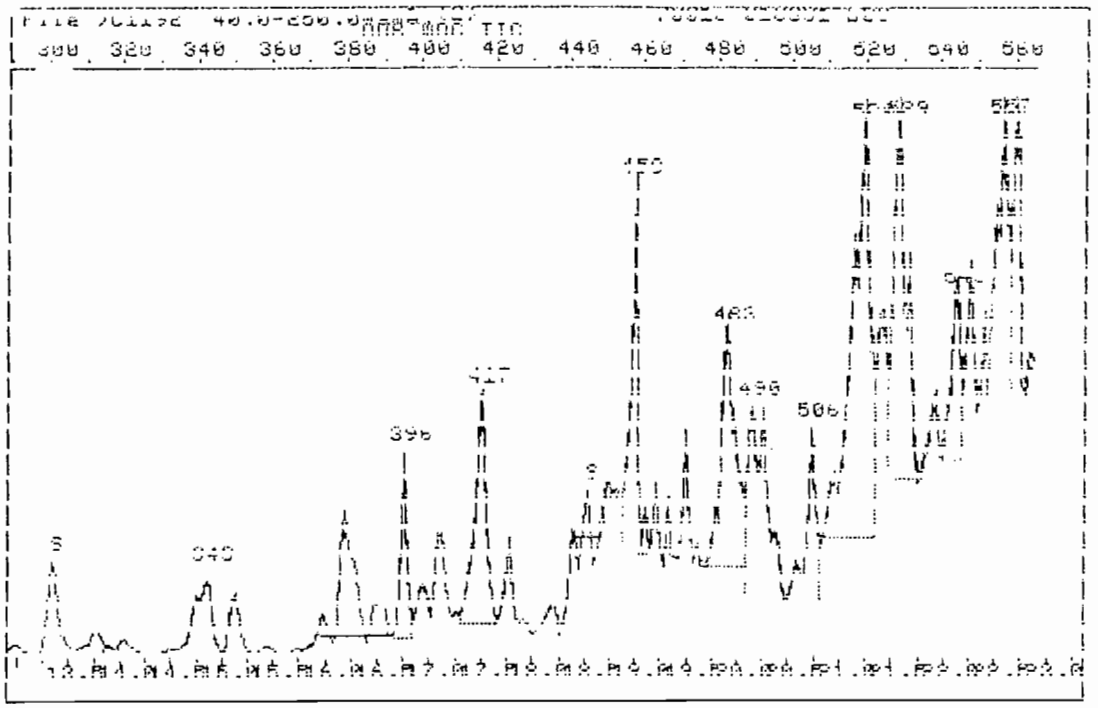
Correction Factor = 1.00

$$\text{Unknown Concentration} = \frac{|\text{Conc Int Std} * \text{Area Unknown}|}{|\text{Area Int Std}|} * \text{Correction Factor}$$

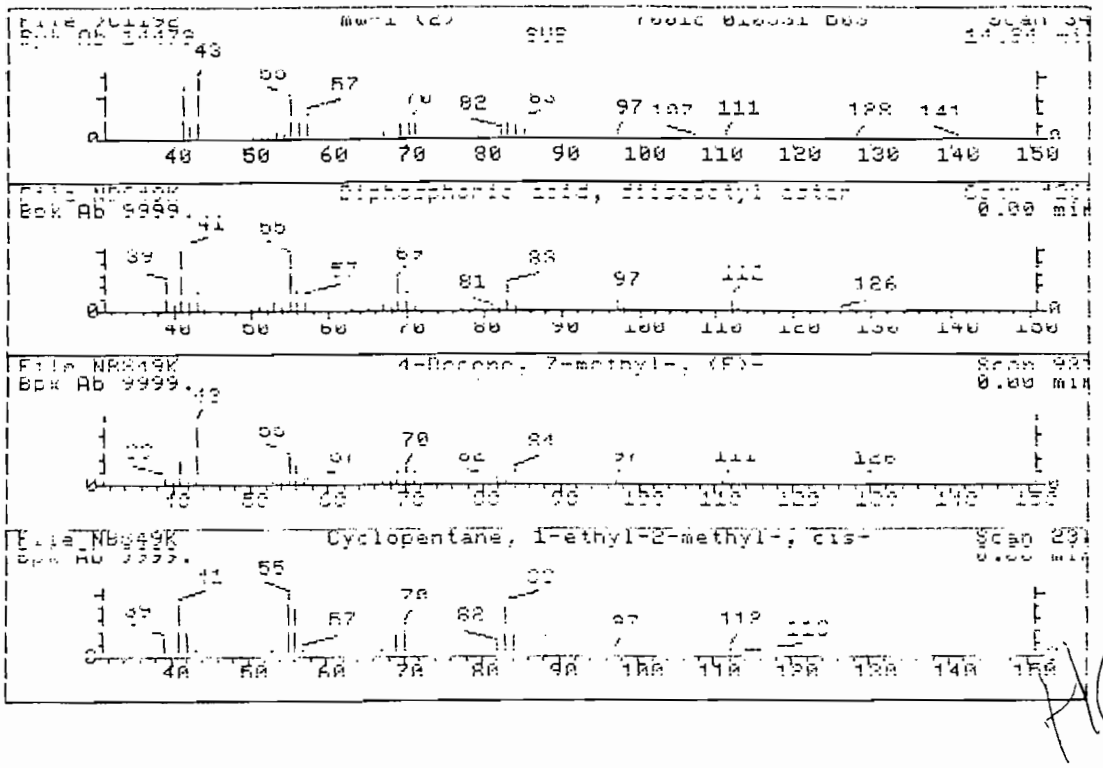




Instrument ID: 7001 Analyzed on: 4/09/01 13:12



Instrument ID: 7001 Analyzed on: 4/19/01 13:12

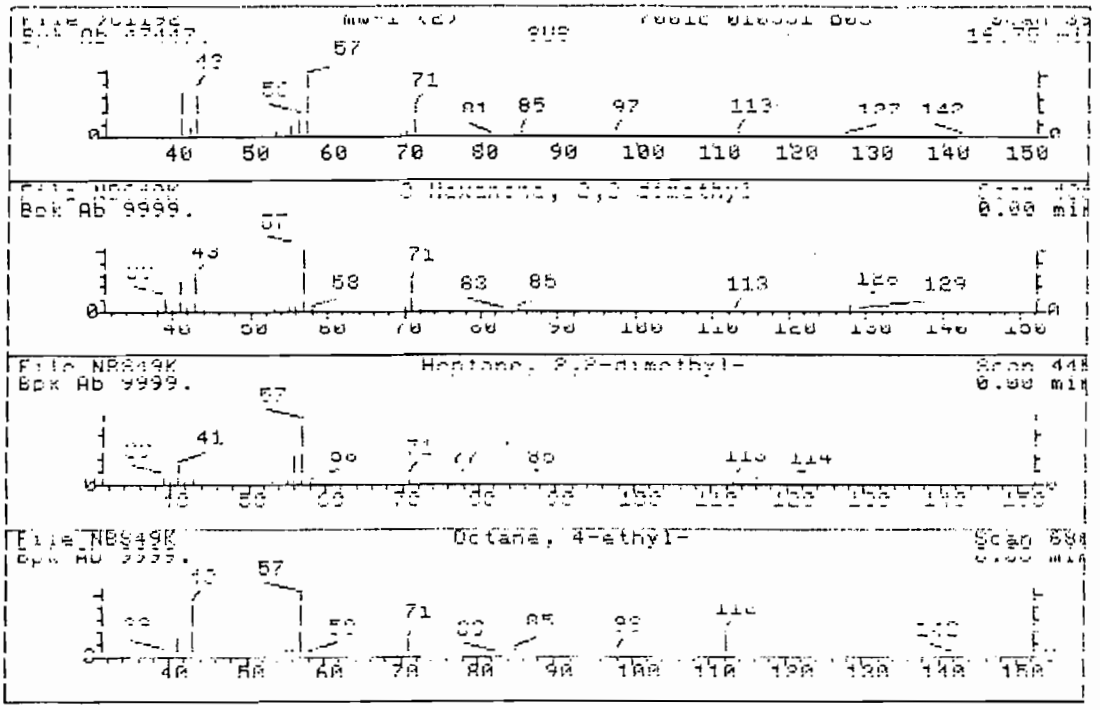


Instrument ID: 7011 Analyzed on: 4/09/01 13:12
Result 2 in PBM results file: LL1197
Retention Time: 14.84 Area: 1074560 Tentative Conc: 42.01
The unknown area is 83.10% of the nearest internal standard

1.	Diphosphoric acid, diisooctyl ester	402 C16H36O7P2
2.	4-Decene, 7-methyl-, (E)-	154 C11H22
3.	Cyclopentane, 1-ethyl-2-methyl-, cis-	112 C8H16
4.	Cyclopentane, 1-ethyl-3-methyl-	112 C8H16
5.	Cyclopentane, 1-ethyl-3-methyl-, cis-	112 C8H16
6.	Cyclopentane, propyl-	112 C8H16

Sample file: >C1192 Spectrum #: 343
Search speed: 1 Tilting option: N No. of ion ranges searched: 4

	Prob.	CAS #	CON #	Root	K	DK	#Fits	TILT	%	CON	C	I	R	IO
1.	40	72101076	12744	NBS49K	91	53	2	0	89	38	14			22
2.	36	62338481	6404	NBS49K	42	53	1	0	73	30	14			13
3.	33*	930892	6161	NBS49K	27	23	0	0	28	36	10			9
4.	28*	3726474	6162	NBS49K	58	49	2	0	64	51	8			
5.	28*	2613663	6164	NBS49K	57	51	2	0	60	51	8			
6.	26*	2040962	3894	NBS49K	32	68	2	0	42	42	8			14



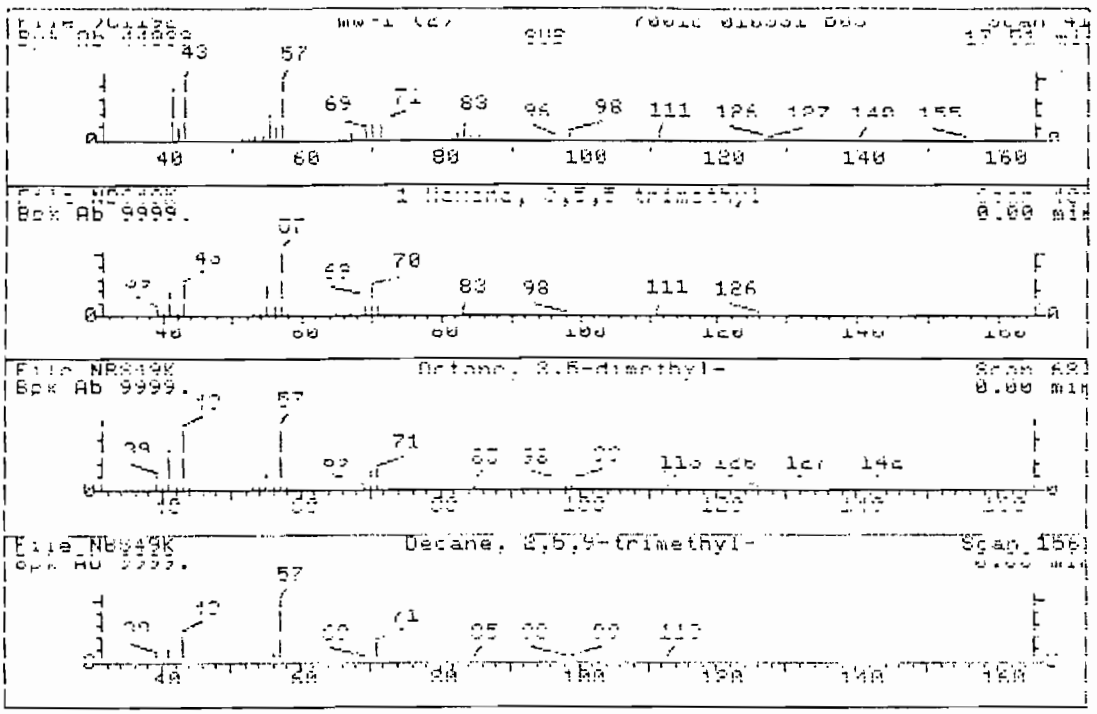
HC

Instrument ID: 7001 Analyzed on: 4/09/01 13:12
Result 3 in PBM results file: LL1192
Retention Time: 16.75 Area: 85439K Tentative Conc: 33.00
The unknown area is 66.07% of the nearest internal standard

1.	3-Hexanone, 2,2-dimethyl-	128 C8H16O
2.	Heptane, 2,2-dimethyl-	128 C9H20
3.	Octane, 4-ethyl-	142 C10H22
4.	Octane, 3-ethyl-	142 C10H22
5.	Octane, 2,3,7-trimethyl-	156 C11H24
6.	Octane, 3,6-dimethyl-	142 C10H22

Sample file: >C1192 Spectrum #: 396
Search speed: 1 Tilting option: N No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROM	K	DK	#HLG	TILT	%	CON	C	R	IV
1.	52	5405798	4306	NBS49K	41	44	2	0	98	19	20		4
2.	47	1071267	1120	NBS49K	34	45	0	0	76	25	17		18
3.	44*	15869460	12088	NBS49K	32	61	2	0	88	25	17		15
4.	43*	5881174	4326	NBS49K	51	42	2	0	64	39	17		32
5.	42	62016346	4957	NBS49K	53	40	1	0	54	29	14		19
6.	39	15869940	12333	NBS49K	46	43	1	0	64	30	14		16



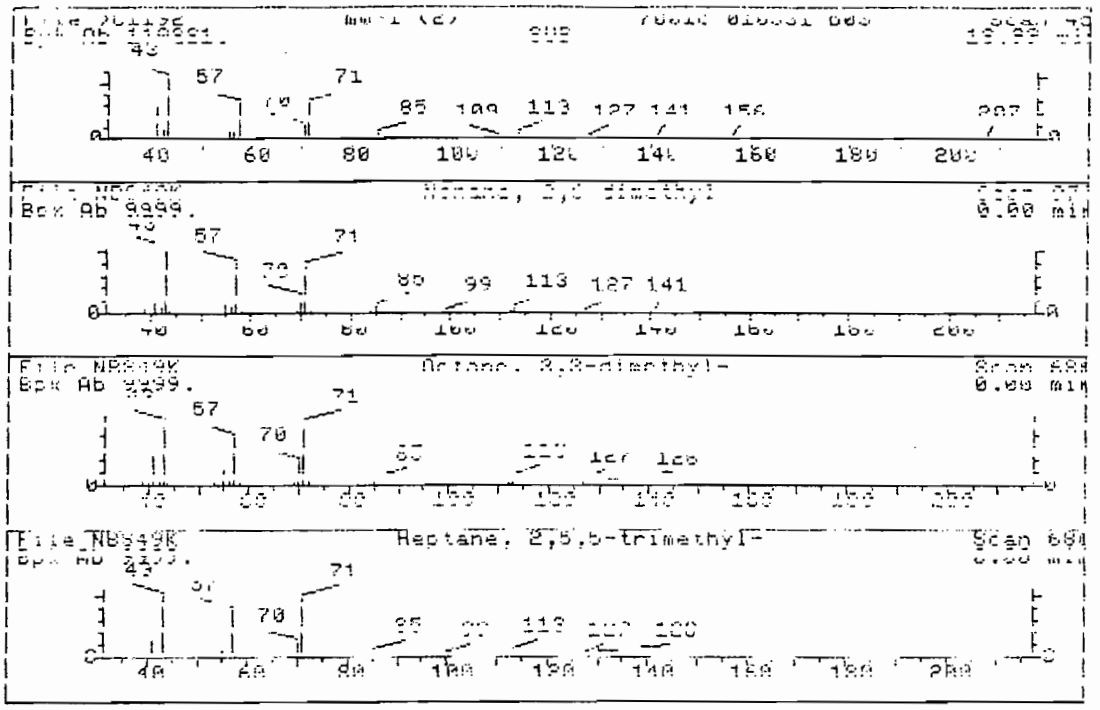
Instrument ID: 7001 Analyzed on: 4/19/01 13:12
Result 4 in PBM results file: LC1192
Retention Time: 17.51 Area: 2116682 Tentative Conc: 78.00
The unknown area is 155.95% of the nearest internal standard

1. 1-Hexene, 3,5,5-trimethyl-	126	C9H18
2. Octane, 3,5-dimethyl-	142	C10H22
3. Decane, 2,5,9-trimethyl-	184	C13H28
4. 3-Undecene, 6-methyl-, (E)-	168	C12H24
5. Hexane, 4-ethyl-2-methyl-	128	C9H20
6. Octane, 3-ethyl-	142	C10H22

HC

Sample file: >C1192 Spectrum #: 417
Search speed: 1 Tilting option: N No. of ion ranges searched: 47

	Prob.	CAS #	CON #	ROUT	K	Dk	#FITS	TIFT	%	CON	C	R	IV
1.	44*	4316658	3955	NBS49K	42	48	2	0	92	27	19	22	
2.	43	15869939	4025	NBS49K	44	49	1	0	84	22	17	14	
3.	37	62108729	4288	NBS49K	40	51	1	0	81	28	14	4	
4.	36	74630527	9550	NBS49K	38	49	2	0	93	28	14		
5.	29	3074757	9710	NBS49K	34	55	1	0	89	31	12		
6.	27*	5881174	4326	NBS49K	34	59	3	0	100	38	10	12	



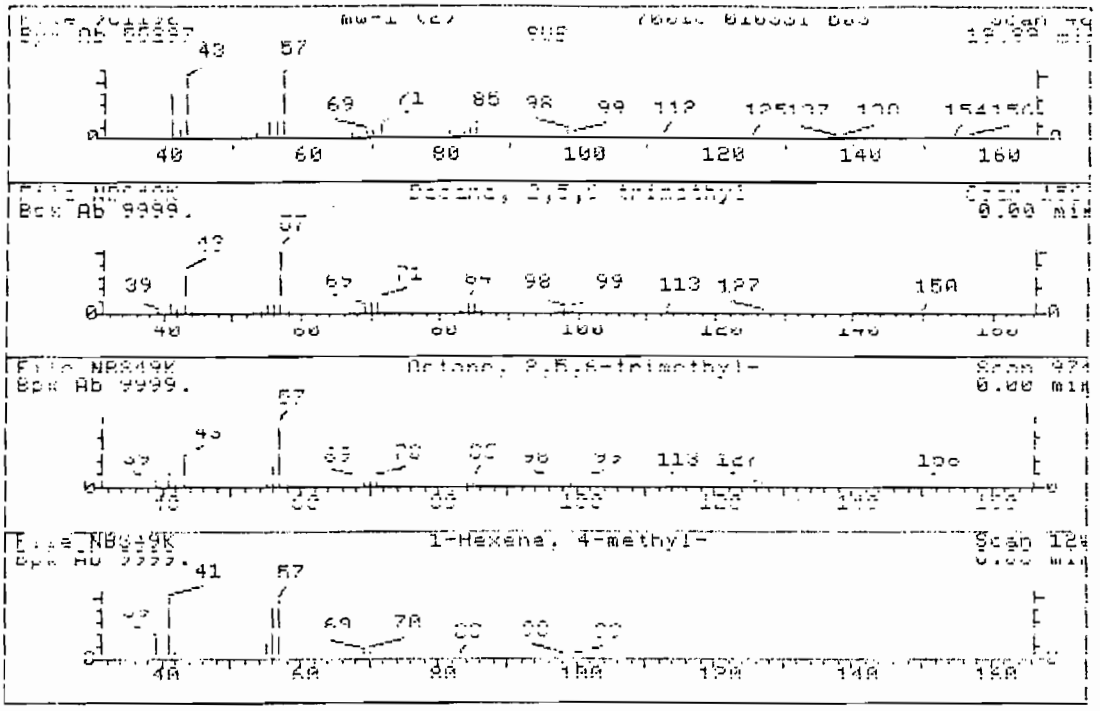
HC.

Instrument ID: 7000 Analyzed on: 4/09/01 13:12
Result 5 in PBM results file: LC1192
Retention Time: 18.99 Area: 1853262 Tentative Conc: 21.00
The unknown area is 141.77% of the nearest internal standard

1. Nonane, 2,6-dimethyl- 156 C11H24
2. Octane, 3,3-dimethyl- 142 C10H22
3. Heptane, 2,5,5-trimethyl- 142 C10H22
4. Octane, 2,3,6-trimethyl- 156 C11H24
5. Octane, 3-ethyl- 142 C10H22
6. Nonane, 2,3-dimethyl- 156 C11H24

Sample file: >C1192 Spectrum #: 45H
Search speed: 1 Tilting option: N No. of ion ranges searched: 2

	Prob.	CAS #	CON #	RUN#	K	DK	#FIG	TILT	%	CON	C I R IO
1.	63	17302782	4554	NBS49K	68	25	1	0	62	20	30 33
2.	52	4110445	4329	NBS49K	54	44	2	0	58	20	20 14
3.	51	1189997	4578	NBS49K	56	34	1	0	56	22	22 25
4.	48	62016335	4356	NBS49K	51	26	1	0	49	25	17 19
5.	44	5881174	4526	NBS49K	50	43	2	0	62	24	17 15
6.	40*	2884062	12128	NBS49K	45	56	2	0	57	27	14 12



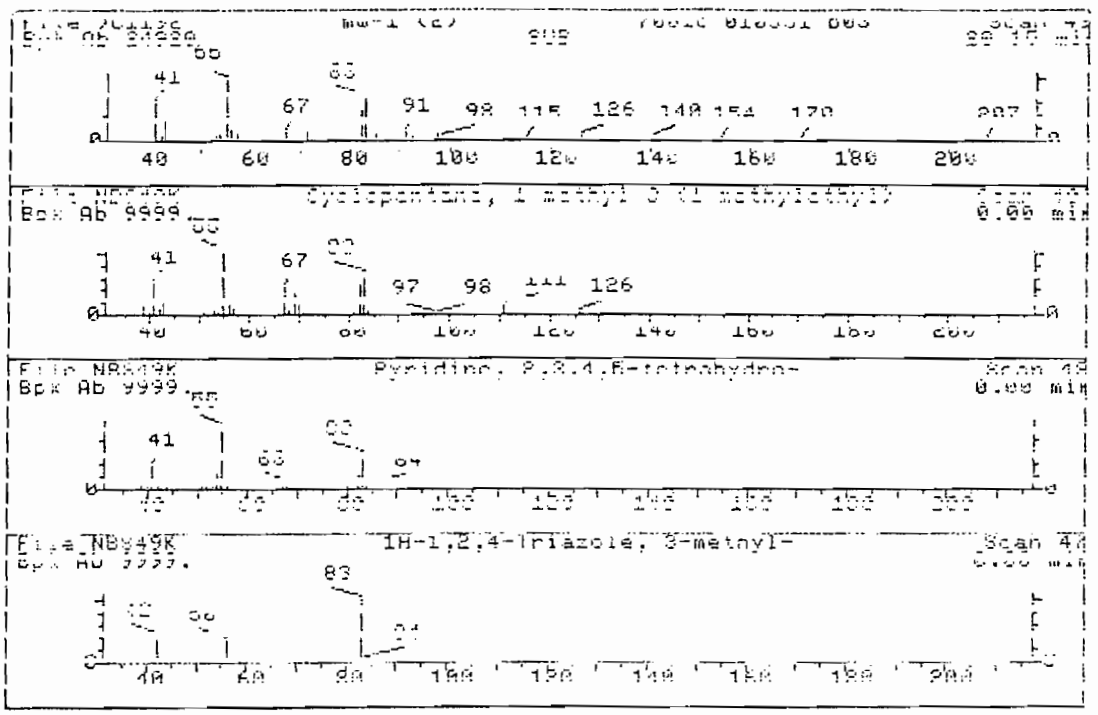
Instrument ID: 7001 Analyzed on: 4/09/11 13:12
Result 6 in PBM results file: LC1192
Retention Time: 19.89 Area: 2611816 Tentative Conc: 100.00
The unknown area is 201.97% of the nearest internal standard

1. Decane, 2,5,6-trimethyl- 184 C13H28
2. Octane, 2,5,6-trimethyl- 156 C11H24
3. 1-Hexene, 4-methyl- 98 C7H14
4. 1-Pentanol, 2-ethyl-4-methyl- 130 C8H18O
5. 2-Decene, 5-methyl-, (Z)- 154 C11H22
6. 1-Octyn-3-ol, 4-ethyl- 154 C10H18O

HC

Sample file: >C1192 Spectrum #: 48>
Search speed: 1 Tilting option: N No. of ion ranges searched: 54

	Prob.	CAS #	CON #	ROUT	K	DK	#F	TILT	%	CON	C	R	IO
1.	76	62108230	6720	NBS49K	69	32	2	0	87	6	45		4
2.	60*	62016142	6680	NBS49K	39	52	1	0	69	15	30		19
3.	55*	37692?1	1042	NBS49K	53	40	1	0	74	35	20		29
4.	52	106672	1264	NBS49K	41	49	2	0	68	18	20		
5.	52	74645866	9525	NBS49K	43	38	2	0	100	18	20		
6.	41	5877429	9523	NBS49K	38	48	2	0	100	27	17		



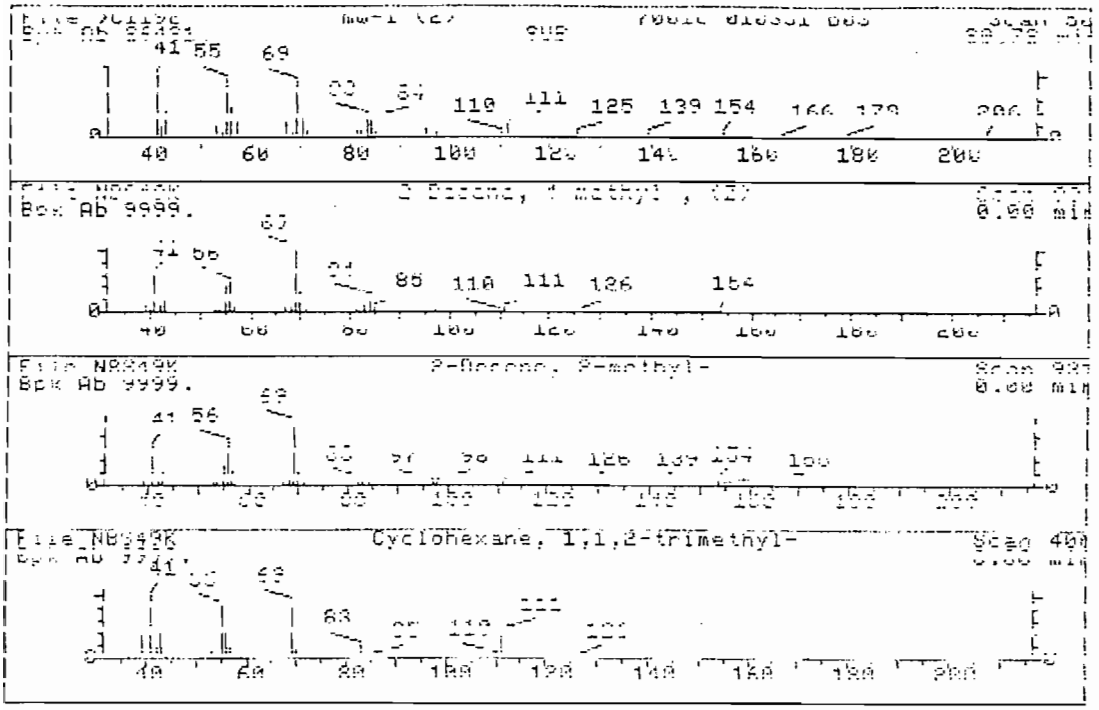
Unk

Instrument ID: 7001 Analyzed on: 4/09/01 13:12
Result 7 in HBM results file: LC1192
Retention Time: 21.15 Area: 26/856 Tentative Conc: 100.00
The unknown area is 207.08% of the nearest internal standard

1. Cyclopentane, 1-methyl-3-(1-methylethyl)- 126 C9H18
2. Pyridine, 2,3,4,5-tetrahydro- 83 C5H9N
3. 1H-1,2,4-Triazole, 3-methyl- 83 C3H5N3

Sample file: >C1192 Spectrum #: 490
Search speed: 1 Tilting option: N No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	ION	C	I	R	V
1.	36*	54718M5	5911	NB549K	28	74	3	0	100	29	14	13		
2.	25*	505180	6152	NB549K	24	69	3	0	126	48	7	12		
3.	11*	7120016	6131	NB549K	25	30	1	0	51	65	2	14		



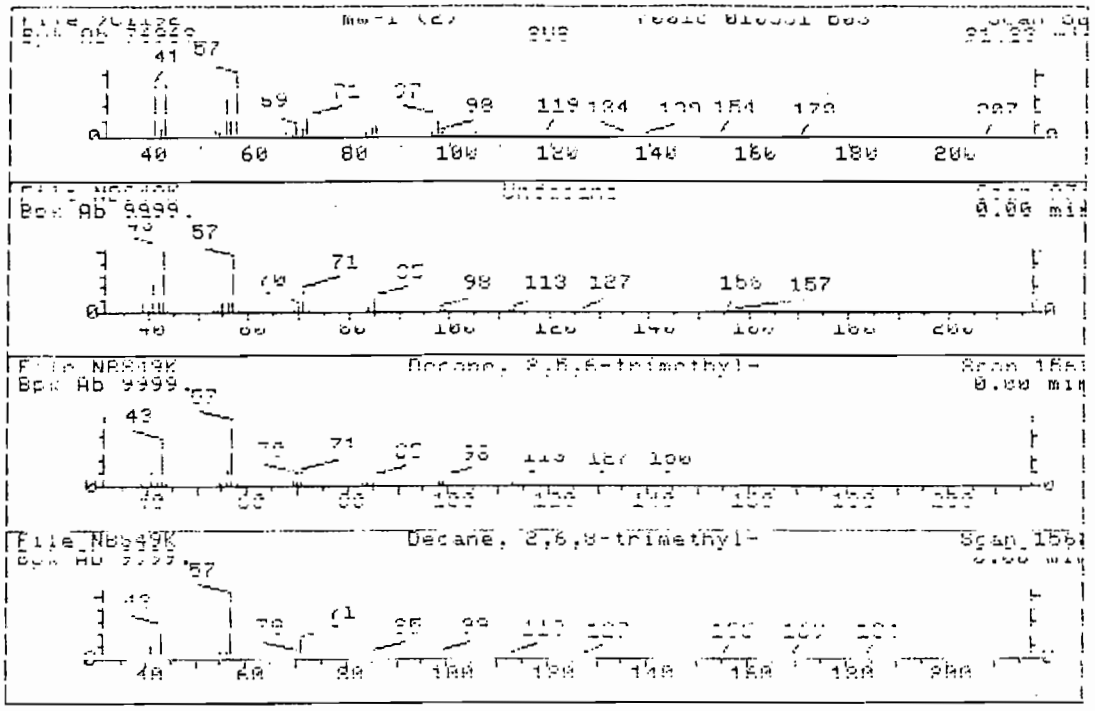
HC

Instrument ID: 7001 Analyzed on: 4/09/01 13:12
Result 8 in PBM results file: LC1192
Retention Time: 20.72 Area: 1335783 Tentative Conc: 52.00
The unknown area is 103.30% of the nearest internal standard

1.	2-Decene, 4-methyl-, (Z)-	154 C11H22
2.	2-Decene, 2-methyl-	154 C11H22
3.	Cyclohexane, 1,1,2-trimethyl-	126 C9H18
4.	Cyclopropane, 1,2-dimethyl-1-pentyl-	140 C10H20
5.	2-Decene, 7-methyl-, (Z)-	154 C11H22
6.	Cyclooctane, 1,4-dimethyl-, cis-	140 C10H20

Sample file: >C1192 Spectrum #: 506
Search speed: 1 Tilting option: N No. of ion ranges searched: 91

	Prob.	CAS #	CON #	RUN	K	DK	#FIX	TILT	%	CON	C	I	R	IU
1.	73*	74630201	6403	NBS49K	56	43	0	0	88	22	32			67
2.	55*	23981922	4059	NBS49K	38	54	0	0	67	35	21			39
3.	53*	7094260	11844	NBS49K	56	52	1	0	79	37	19			44
4.	49	62238044	6371	NBS49K	68	34	1	0	70	26	19			
5.	44*	74630232	11887	NBS49K	56	51	2	0	67	37	17			
6.	44*	13151990	4115	NBS49K	56	54	2	0	62	37	17			



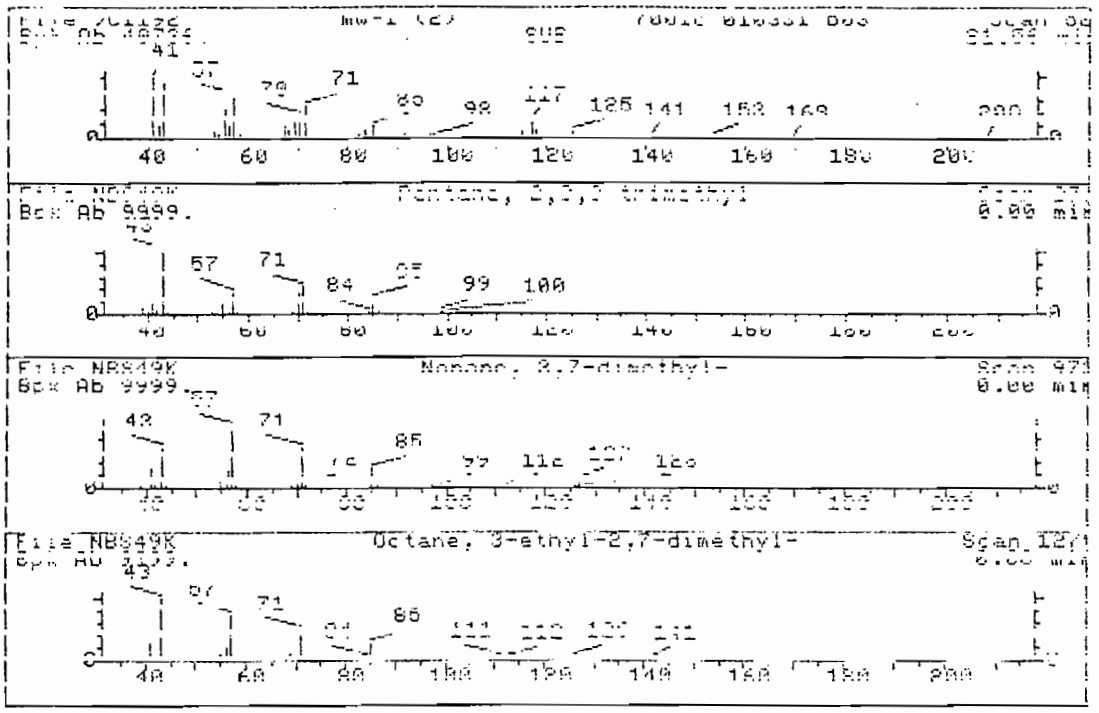
HC

Instrument ID: 7001 Analyzed on: 4/09/01 13:12
Result 9 in PBM results file: LC1192
Retention Time: 21.23 Area: 5603333 Tentative Conc: 220.00
The unknown area is 433.20% of the nearest internal standard

1.	Undecane	156 C11H24
2.	Decane, 2,5,6-trimethyl-	184 C13H28
3.	Decane, 2,6,8-trimethyl-	184 C13H28
4.	Octane, 2,5,6-trimethyl-	156 C11H24
5.	Dodecane, 3-methyl-	184 C13H28
6.	Hexane, 3-ethyl-4-methyl-	128 C9H20

Sample file: >C1192 Spectrum #: 520
Search speed: 1 Tilting option: N No. of ion ranges searched: 27

	Prob.	CAS #	CON #	ROUT	K	DK	#Fit	Tilt	%	CON	CIR	IV
1.	53	1120214	6682	NBS49K	62	35	1	0	83	23	22	23
2.	48	62108250	6770	NBS49K	59	42	1	0	77	21	17	19
3.	42	62108263	4392	NBS49K	45	47	2	0	98	22	17	5
4.	41	62016142	6680	NBS49K	49	38	1	0	79	28	14	18
5.	41	17312571	6768	NBS49K	50	49	2	0	74	21	17	2
6.	37	3074779	3964	NBS49K	51	45	2	0	82	30	14	14



Instrument ID: 7001 Analyzed on: 4/19/01 13:12
Result 10 in PBM results file: LC1192
Retention Time: 21.56 Area: 32104509 Tentative Conc: 120.00
The unknown area is 247.80% of the nearest internal standard

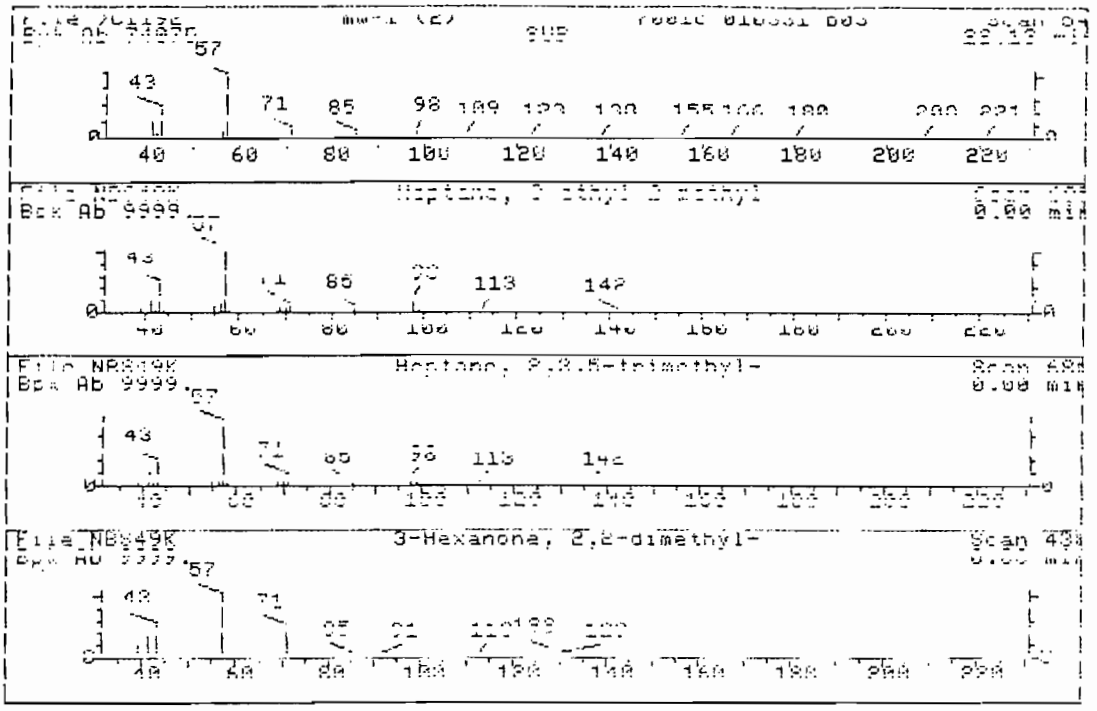
1. Pentane, 2,3,3-trimethyl-
2. Nonane, 3,7-dimethyl-
3. Octane, 3-ethyl-2,7-dimethyl-
4. 2,4-DIMETHYL-1-HEPTENE
5. Butane, 2,2-dimethyl-
6. Heptane, 4-azido-

114 C8H18
[illegible] C11H24
170 C12H26
126 C9H18
86 C6H14
141 C7H13N3

HC

Sample file: >C1192 Spectrum #: 529
Search speed: 1 Tilting option: N No. of ion ranges searched: 46

	Prob.	CAS #	CON #	ROUT	K	DK	#FRG	TIC	%	CON	C	R
1.	24	560214	6557	NBS49K	40	48	2	0	84	43	8	7
2.	20	17302328	6677	NBS49K	51	36	2	0	65	53	5	12
3.	15	62183555	6736	NBS49K	56	35	2	0	75	56	3	9
4.	12*	19549872	3991	NBS49K	29	65	0	0	58	64	2	
5.	11	75832	4239	NBS49K	41	51	1	0	68	65	2	
6.	11*	27126223	4018	NBS49K	24	58	3	0	173	64	2	

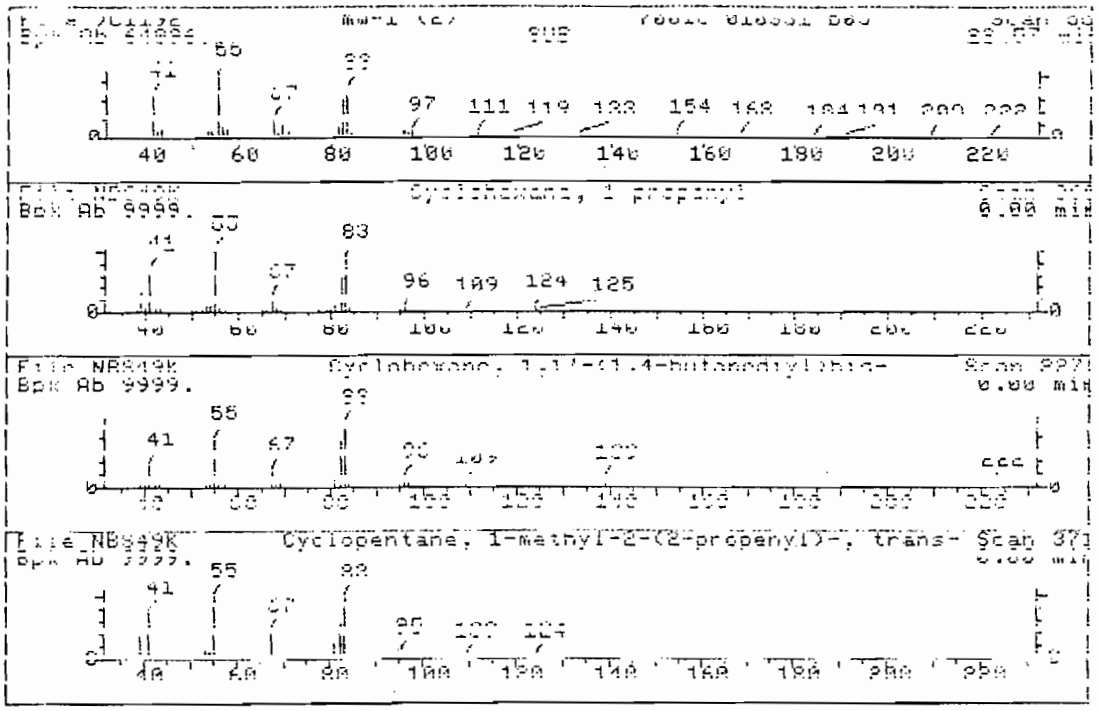


Instrument ID: 7000 Analyzed on: 4/09/01 13:12
Result 11 in PBM results file: LC1192
Retention Time: 22.13 Area: 117956 Tentative Conc: 46.00
The unknown area is 91.09% of the nearest internal standard

1.	Heptane, 3-ethyl-2-methyl-	14% C10H22
2.	Heptane, 2,3,5-trimethyl-	142 C10H22
3.	3-Hexanone, 2,2-dimethyl-	128 C8H16O
4.	Heptane, 4-ethyl-2,2,6,6-tetramethyl-	14 C13H28
5.	1-Pentene, 4,4-dimethyl-	98 C7H14

Sample file: >C1192 Spectrum #: >45
Search speed: 1 Tilting option: N No. of ion ranges searched: 48

	Prob.	CAS #	Cmpd #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	O
1.	78	14876290	9509	NBS49K	46	39	2	0	73	4	55	15		
2.	70	20278857	1271	NBS49K	37	39	2	0	89	8	42	12		
3.	52	5405798	4306	NBS49K	42	43	2	0	79	20	20	14		
4.	52	62108510	1210	NBS49K	36	46	2	0	81	18	20	12		
5.	36*	762629	1234	NBS49K	20	56	2	0	72	26	14	13		



Instrument ID: 7011 Analyzed on: 4/19/01 15:12
Result 12 in PBM results file: LC1197
Retention Time: 22.57 Area: 2414562 Tentative Conc: 93.00
The unknown area is 186.72% of the nearest internal standard

1.	Cyclohexane, 1-propenyl-	124 C9H16
2.	Cyclohexane, 1,1'-(1,4-butanediyl)bis-	222 C16H30
3.	Cyclopentane, 1-methyl-2-(2-propenyl)-, trans-	124 C9H16
4.	Cyclohexane, 2-propenyl-	124 C9H16
5.	Cyclohexane, hexyl-	168 C12H24
6.	Cyclohexane, (1-methylethyl)-	126 C9H18

Sample file: >C1192 Spectrum #: 557
Search speed: 1 Tilting option: N No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROUT	K	Dk	#FIG	TILT	%	CON	C I R IO
1.	67	5364830	6171	NBS49K	64	35	2	0	94	15	34
2.	60	6165442	6066	NBS49K	63	57	2	0	80	14	31 13
3.	56*	50746537	6173	NBS49K	59	42	2	0	69	26	24
4.	48	2114423	6172	NBS49K	59	41	1	0	72	21	17
5.	44*	4292755	6213	NBS49K	27	68	1	0	66	23	17
6.	36	696297	6181	NBS49K	64	31	2	0	96	38	14

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-2(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1193
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/09/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	2.	BJ
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	10.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-2(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-2(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1193
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/09/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	12.11	100.	J
2.		Unknown	15.11	94.	J
3.		Hydrocarbon	15.61	83.	J
4.		Hydrocarbon	15.90	160.	J
5.		Hydrocarbon	19.08	71.	J
6.		Hydrocarbon	21.76	160.	J
7.					
8.					
9.					
10.					
11.					
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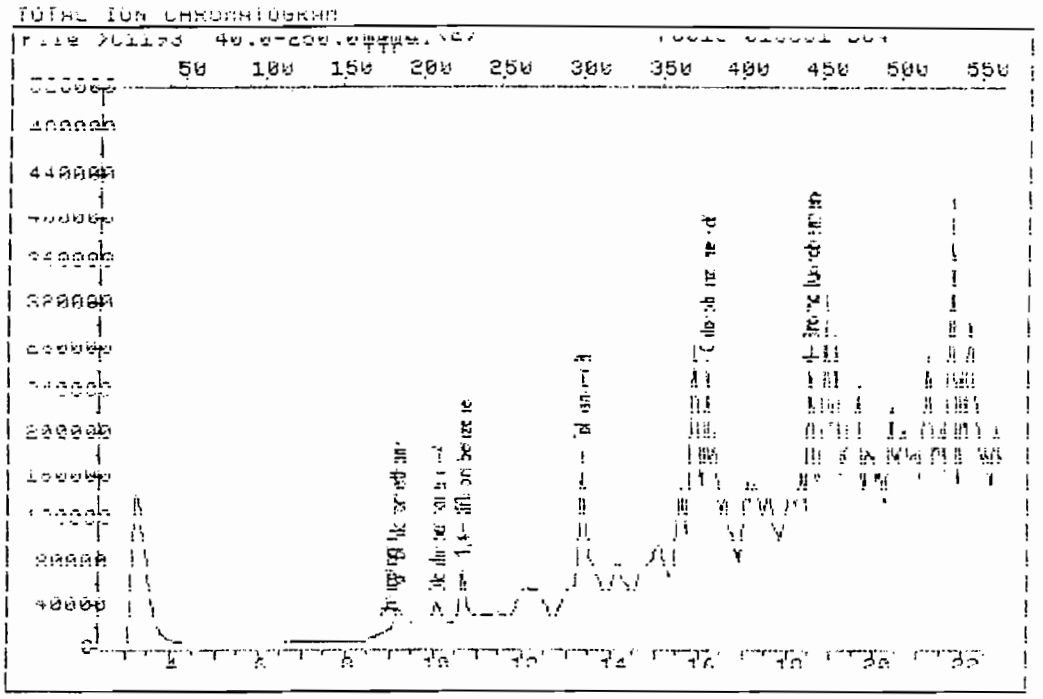
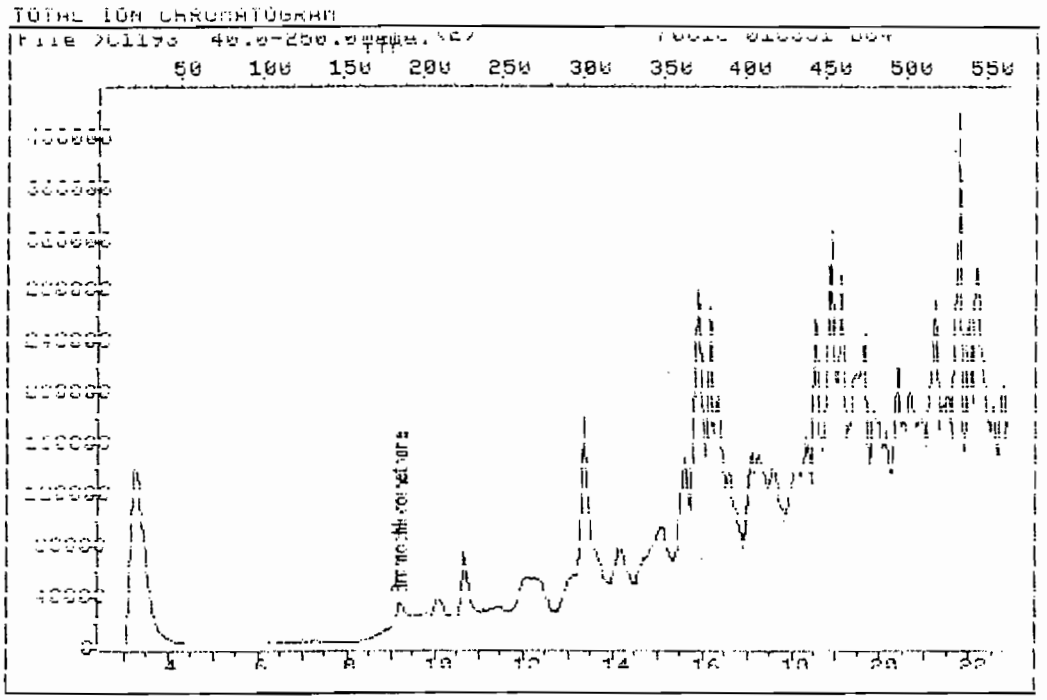


Data File: >C:\193::\D3 Quant Output File: ^C:\193::\QT
Name: mw-2 (2) Instrument ID: /\\\\1 \.
Misc: 7001c 010331 b04

Id File: \.\S91\.::MT
Title: HP V0A Continuing Calibration Standard
Last Calibration: 000810 0M:31 Last Qcal Time: **\-09 1\::-4

Operator ID: MANAGER
Quant Time : 010409 14:\ >
Injected at: **0409 13:4\



Data File: >C1193::03
Name: mw-2 (2)
Misc: 7001c 010331 b04

Quant Output File: 'C1193::QT
Instrument ID: 7001 C

Id File: IOF11>::MT
Title: Freon 113 ID File
Last Calibration: :

Last Cal Time: **-409 11:45

Operator ID: MANAGER
Quant Time : 010473 11:-?
Injected at: **0409 13:41

Operator ID: MANAGER Quant Rev: 7 Quant Time: 011489 14:12
Output File: ^C1193::QT Injected at: **0409 13:41
Data File: >C1193::03 Dilution Factor: 1.0000
Name: mw-2 (2) Instrument ID: 7001 C
Misc: 7001c 010531 bl4

IO File: IDS91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:51 Last Qual Time: **0409 11:44

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.18	128.0	22118	50.00	ug	4
18)	Chloroform	9.00	83.0	3709	1.62	UG	86
19)	1,2-Dichloroethane-d4	10.09	65.0	108952	47.59	ug	94
22)	*1,4-Difluorobenzene	10.66	114.0	152958	50.00	UG	99
36)	*Chlorobenzene-d5	16.16	117.0	180308	50.00	ug	97
47)	Toluene d-8	13.54	98.0	230516	46.52	UG	89
48)	Bromofluorobenzene	18.51	95.0	110302	52.61	ug	97

* Compound is ISTD

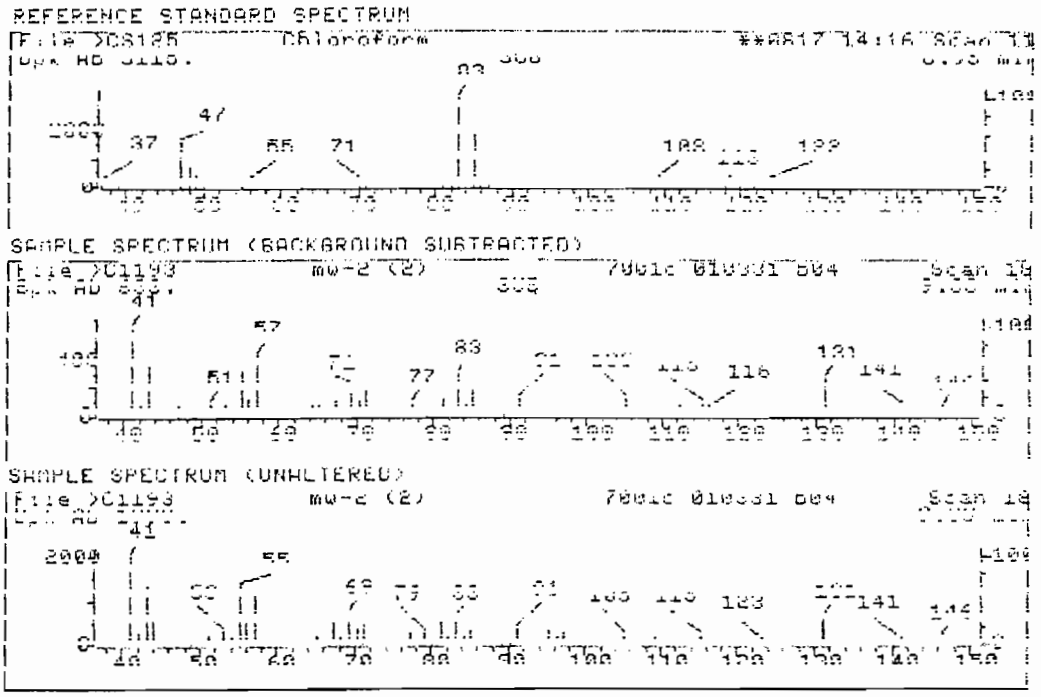
QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 2 Quant Time: 011493 11:52
Output File: 'C1193::QT Injected at: **0409 13:41
Data File: >C1193::03 Dilution Factor: 1.000000
Name: mw-2 (2) Instrument ID: 7000 C
Misc: 7001c 010331 b04

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **0409 10:45

	Compound	R.T.	Q ion	Area	Conc	Units	n
1)	*Bromochloromethane	9.18	128.0	21606	50.00	ng	14

* Compound is ISTD



Data File: >C1193::03
Name: mw-2 (2)
Misc: 700ic 010331 b04
Quant Time: 010409 14:05
Injected at: **0409 13:41
Last Qcal Time: **0409 11:44

Quant Output File: ^C1193::QT
Instrument ID: >0001 1.

Quant ID File: [...]91C::.I
Last Calibration: 00MR10 08:21

Compound No : 18
Compound Name : Chloroform
Scan Number : 181
Retention Time: 9.00 min.
Quant Ion : 83.0
Area : 37...
Concentration : 1.69 UG
q-value : 86

MS data file header from : >C1193::D3

Sample: mw-2 (2) Operator: MANAGER SUPER GRP. 4/[illegible]/01 1[illegible]:41
Misc : 7001c 010331 b04
Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7001 C
Method file: METH03 Tuning file: MI[illegible]03 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	[illegible]30.	230.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0

>C1193 mw-2 (2) 7001c 010331 b04
40.01 250.0 CLP TIC
Upslope: .2000 Area Reject: 60[illegible]67. Max Peaks: 12 Bunch: -1 Valley >100 %
Unslope: 0.0000 Results File IC1193 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	3.27	15	22	61	141[illegible]44	35[illegible]823	[illegible]42[illegible]864	100.00	19.99[illegible]
2	12.11	25[illegible]	26[illegible]	28[illegible]	34[illegible]71	26[illegible]0375	12625[illegible]6*	36.89	7.230
3	15.11	3[illegible]5	3[illegible]0	3[illegible]2	47[illegible]62	3666657	113[illegible]-[illegible]6	[illegible][illegible].24	6.5[illegible]3
4	15.61	35[illegible]	36[illegible]	36[illegible]	8[illegible][illegible]21	24[illegible][illegible]454	1[illegible]842[illegible]0	29.34	5.751
5	15.90	367	372	372	17[illegible]489	42[illegible][illegible]44	1900[illegible][illegible]*	[illegible][illegible].55	10[illegible]
6	17.10	400	405	40[illegible]	74889	19[illegible][illegible]112	720716	21.06	4.127
7	18.87	[illegible]48	[illegible]54	45[illegible]	1[illegible][illegible]152	4408637	181[illegible]10	[illegible]2.89	10.[illegible] [illegible]
8	19.08	458	461	464	136080	2[illegible]34595	865572*	25.29	4.957
9	20.[illegible]9	[illegible]92	[illegible]96	[illegible]10	8[illegible]054	[illegible]196117	81[illegible][illegible]58	[illegible][illegible].8[illegible]	4.6[illegible]3
10	21.22	513	519	52[illegible]	11[illegible]127	42[illegible]962	1098269	3[illegible].09	6.289
11	21.[illegible]6	[illegible]9	[illegible]4	[illegible]7	261[illegible]27	4624994	192[illegible]89	[illegible]6.30	11.[illegible][illegible]
12	22.12	547	544	[illegible]5[illegible]	13[illegible]902	54[illegible]5746	1499402*	43.82	8.586

Sum of corrected areas: 1746[illegible]20.

Summary of Unknowns PBM Library Search and Quantitation

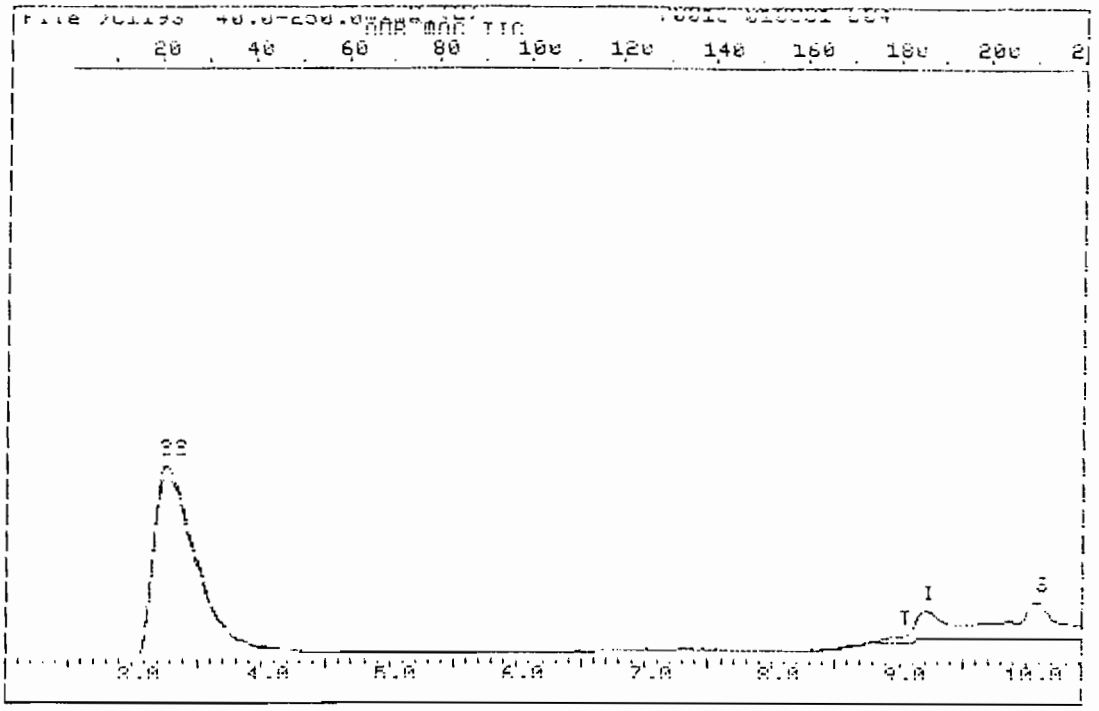
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	764601.	9.18	2.91 - 9.92
2	50.0	601670.	10.66	9.9[illegible] - 1[illegible].41
3	50.0	607597.	16.16	13.41 - 22.85

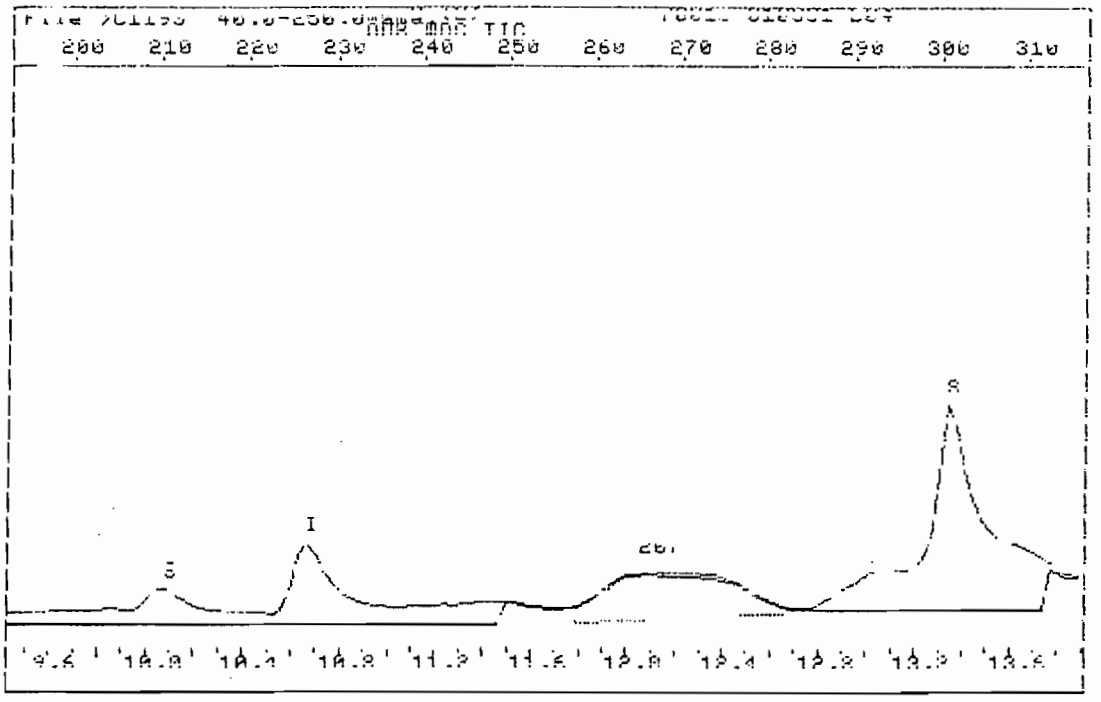
Dilution Factor = 1.00 This sample was 1000.00 g or m

Correction Factor = 1.00

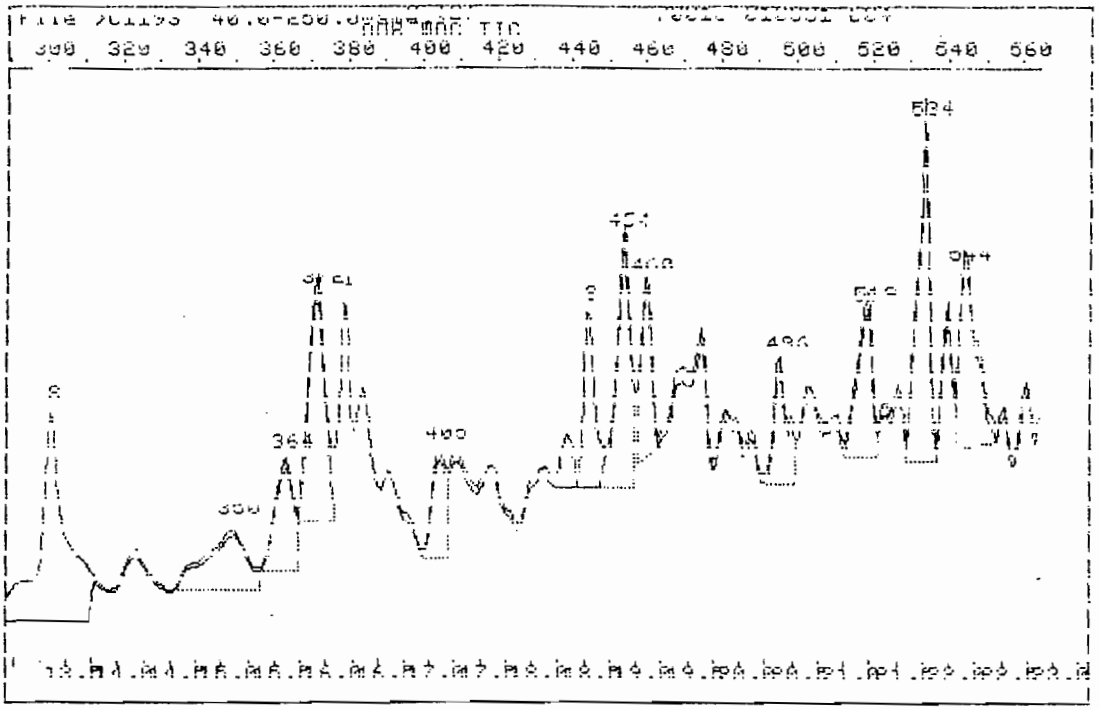
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

1:11 PM TUE., 8 MAY , 2001





Instrument ID: 7011 Analyzed on: 4/09/01 13:41



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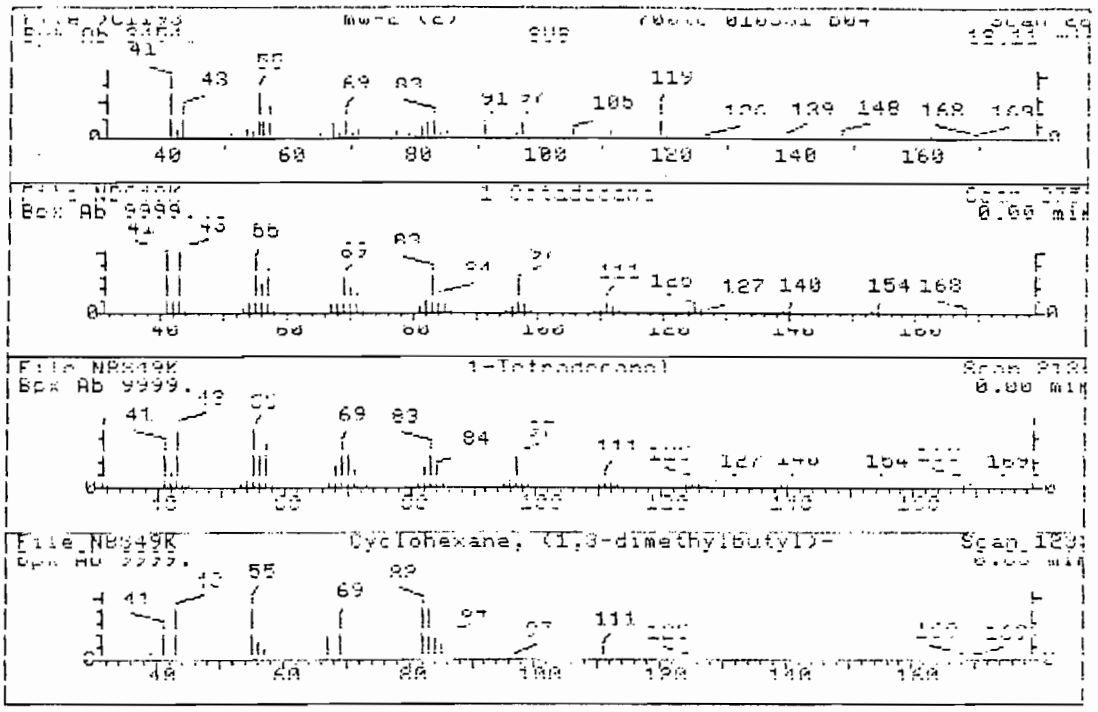


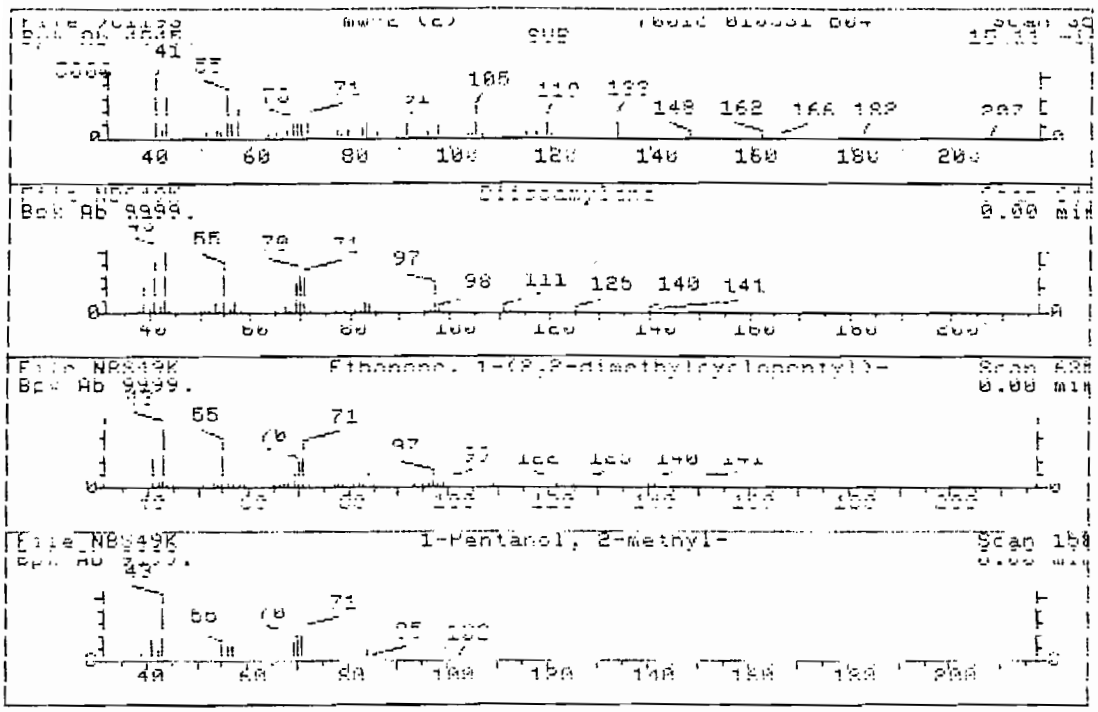
UNK

Instrument ID: 7000 Analyzed on: 4/09/01 13:41
Result 2 in PBM results file: LC1193
Retention Time: 12.11 Area: 1262536 Tentative Conc: 100.00
The unknown area is 209.84% of the nearest internal standard

1.	1-Octadecene	25% C18H36
2.	1-Tetradecanol	7.4 C14H 0
3.	Cyclohexane, (1,3-dimethylbutyl)-	16% C12H24
4.	Cyclopentane, 1-methyl-2-(2-propenyl)-, trans-	12% C9H16
5.	Cyclopentane, 1-hexyl-3-methyl-	16% C12H24
6.	Cyclopentane, 1-methyl-3-(1-methylethyl)-	12% C9H

Sample file: >C1193 Spectrum #: 26%
Search speed: 1 Tilting option: N No. of ion ranges searched: -5

	Prob.	CAS #	CON #	ROUT	K	DK	#FLG	TILT	%	CON	C	I	R	IO
1.	25	11%%89	9%19	NBS49K	63	%4	2	0	40	50	7		13	
2.	25	112721	9288	NBS49K	64	64	2	0	47	47	7		14	
3.	20*	61142%6	6%%5	NBS49K	43	%4	2	0	40	52	5		19	
4.	20*	50%46537	6173	NBS49K	37	49	1	0	41	53	5		19	
5.	20*	61142%%5	6%14	NBS49K	38	%8	2	0	55	52	5		14	
6.	18*	53%7188%	5911	NBS49K	29	58	0	0	36	59	4		21	

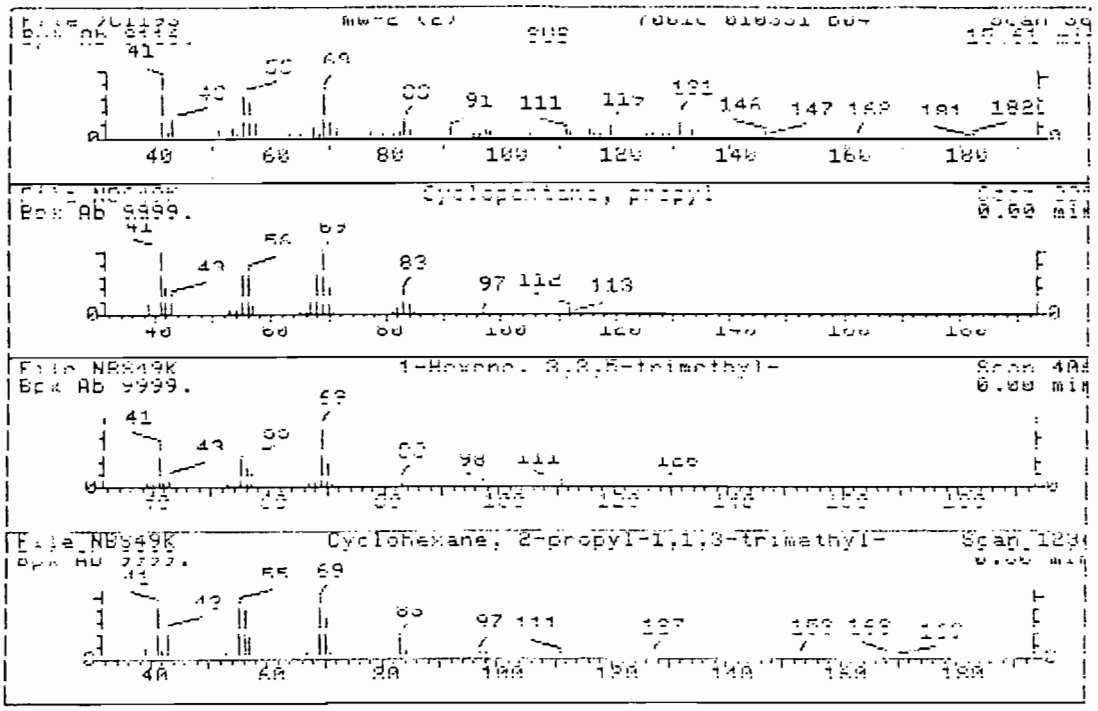


Instrument ID: 7000 Analyzed on: 4/09/01 13:41
Result 3 in PBM results file: LL1193
Retention Time: 19.11 Area: 113726 Tentative Conc: 94.00
The unknown area is 187.20% of the nearest internal standard

1. Diisoamylene 140 C10H20
2. Ethanone, 1-(2,2-dimethylcyclopentyl)- 140 C9H16O
3. 1-Pentanol, 2-methyl- 102 C6H14O
4. Hexane, 3-methyl- 100 C7H16
5. Heptane, 4-methyl- 114 C8H18
6. 1-Hexacosanol 382 C26H54O

Sample file: >C1193 Spectrum #: 3511
Search speed: 1 Tilting option: N No. of ion ranges searched: 61

	Prob.	CAS #	CON #	RUN	K	DK	#FLG	TILT	%	CON	C	I	R	IU
1.	30*	54063091	9179	NBS49K	43	49	2	0	40	47	10			13
2.	20*	3664753	3983	NBS49K	40	65	2	0	54	52	5			14
3.	12*	105306	4282	NBS49K	48	47	2	0	66	61	2			6
4.	11	589344	4274	NBS49K	38	48	2	0	66	61	2			
5.	11	589537	3915	NBS49K	38	49	1	0	60	61	2			
6.	11	506525	9370	NBS49K	70	95	3	0	59	61	2			12



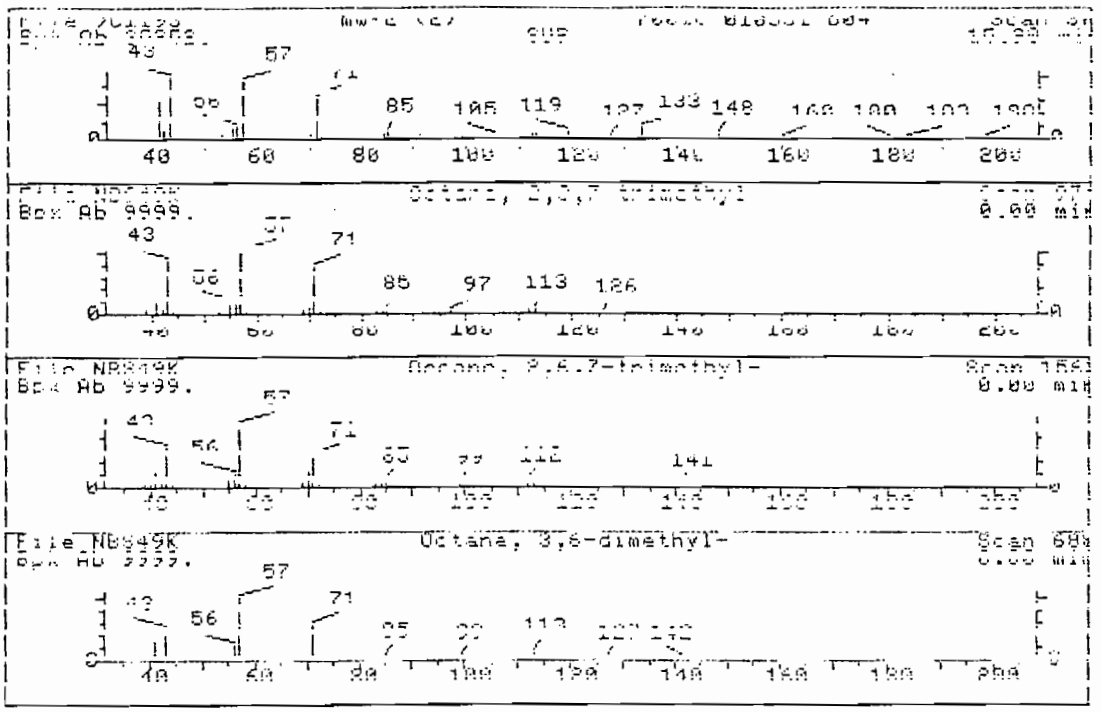
HC

Instrument ID: 7011 Analyzed on: 4/09/01 13:41
Result 4 in PBM results file: LC119>
Retention Time: 15.61 Area: 10042110 Tentative Conc: 83.00
The unknown area is 165.27% of the nearest internal standard

1. Cyclopentane, propyl- 112 C8H16
2. 1-Hexene, 3,3,5-trimethyl- 126 C9H18
3. Cyclohexane, 2-propyl-1,1,3-trimethyl- 168 C12H24
4. Cyclooctane, 1,4-dimethyl-, trans- 140 C10H20
5. Cyclopropane, 1-methyl-2-(3-methylpentyl)- 140 C10H20
6. 3-Decene 140 C10H20

Sample file: >C1193 Spectrum #: 364
Search speed: 1 Tilting option: N No. of ion ranges searched: 47

	Prob.	CAS #	CON #	ROOT	K	Ok	#Pks	Tilt	%	CON	C	R IV
1.	45*	2040962	3894	NBS49K	67	48	3	0	79	37	17	4
2.	31*	13427435	3954	NBS49K	27	66	0	0	80	45	8	19
3.	31	81983702	4139	NBS49K	70	40	2	0	58	37	10	7
4.	31*	13151989	4014	NBS49K	68	41	1	0	54	60	8	66
5.	31*	62238027	3993	NBS49K	51	45	0	0	39	60	8	61
6.	27	19398379	4012	NBS49K	63	46	2	0	78	37	10	13



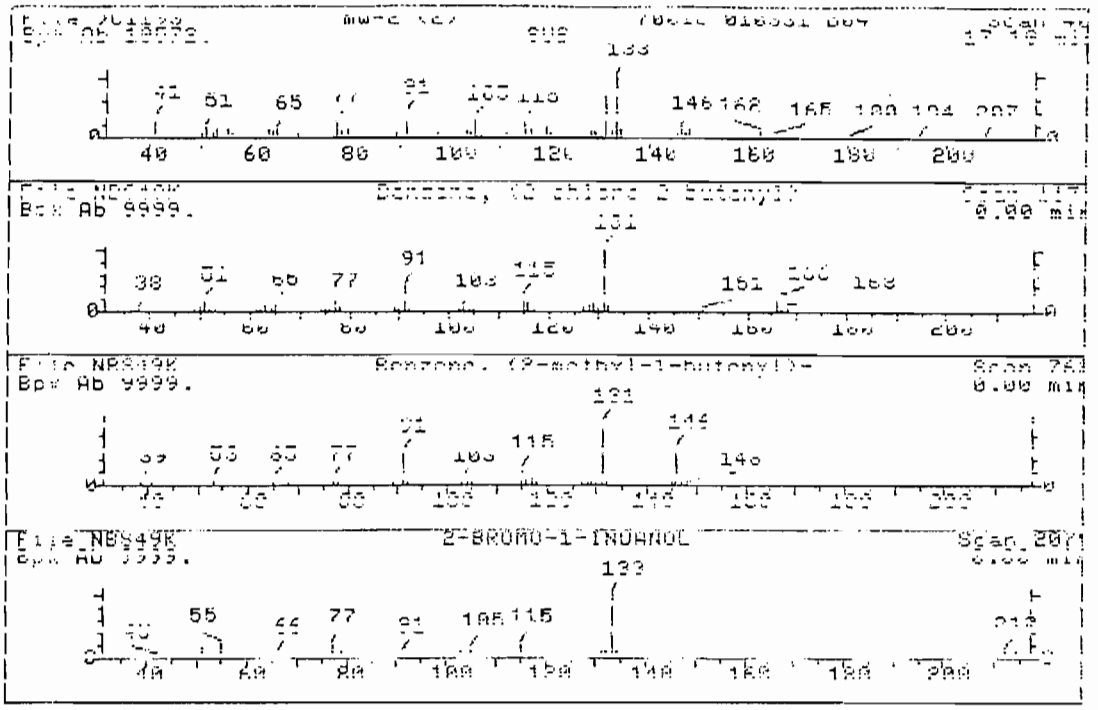
HC

Instrument ID: 7001 Analyzed on: 4/09/01 13:41
Result 5 in PBM results file: LC1193
Retention Time: 15.90 Area: 1900823 Tentative Conc: 161.00
The unknown area is 112.85% of the nearest internal standard

1.	Octane, 2,3,7-trimethyl-	156 C11H24
2.	Decane, 2,6,7-trimethyl-	184 C13H28
3.	Octane, 3,6-dimethyl-	142 C10H22
4.	Butane, 2,2-dimethyl-	86 C6H14
5.	Octane, 2,3,6-trimethyl-	156 C11H24
6.	Octane, 3-ethyl-	142 C10H22

Sample file: >C1193 Spectrum #: 372
Search speed: 1 Tilting option: N No. of ion ranges searched: 49

	Prob.	CAS #	CON #	ROOT	K	DK	#HIT	TIE	%	CON	CUR	IV
1.	60	62016>46	4357	NBS49K	57	36	2	0	86	15	30	9
2.	60	62108252	4390	NBS49K	50	48	2	0	89	15	31	12
3.	52	15869940	12333	NBS49K	44	45	2	0	78	17	20	4
4.	52	75832	4259	NBS49K	39	53	1	0	64	20	20	
5.	52	62016>35	4356	NBS49K	49	43	2	0	77	20	20	
6.	41	5881174	4326	NBS49K	44	49	2	0	87	23	17	1

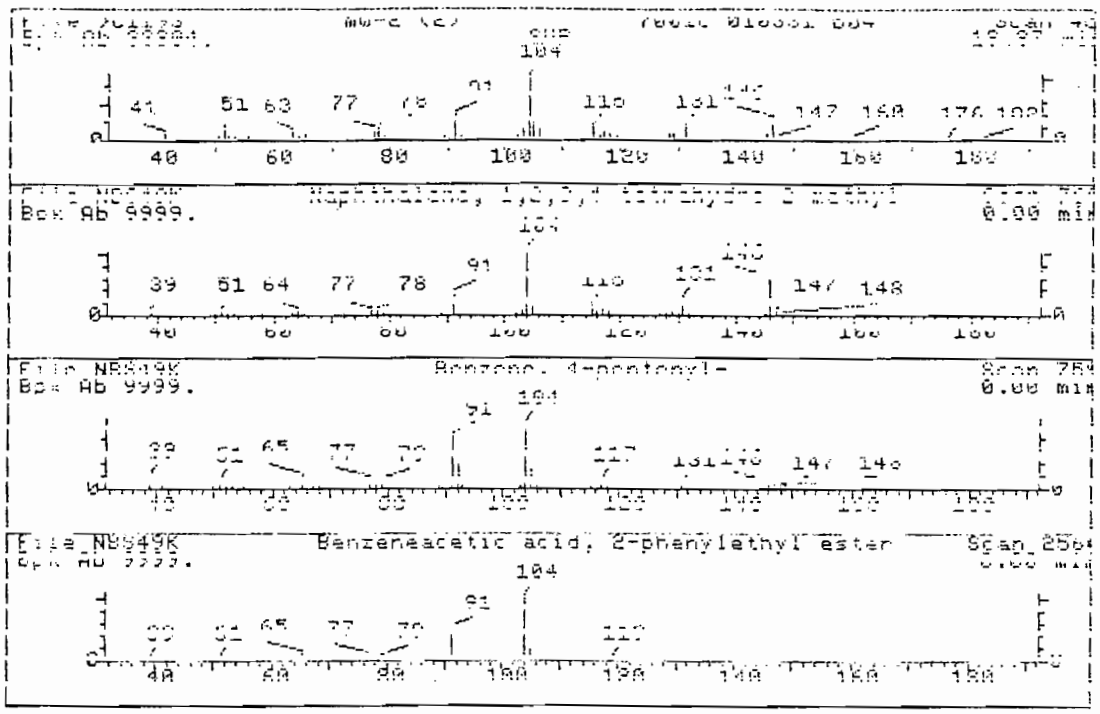


Instrument ID: 7000L Analyzed on: 4/19/01 13:41
Result 6 in PBM results file: LC1193
Retention Time: 17.10 Area: 720716 Tentative Conc: 59.00
The unknown area is 118.62% of the nearest internal standard

1. Benzene, (2-chloro-2-butenyl)- 166 C10H11Cl
2. Benzene, (2-methyl-1-butenyl)- 146 C11H14
3. 2-BROMO-1-INDANOL 212 C9H9BrO
4. 1H-Indene, 2,3-dihydro-1,1-dimethyl- 146 C11H14
5. Benzene, 1-(chloromethyl)-4-(2-propenyl)- 166 C10H11Cl
6. 1H-Indene, 2,3-dihydro-1,2-dimethyl- 146 C11H14

Sample file: >C1193 Spectrum #: 4113
Search speed: 1 Tilting option: N No. of ion ranges searched: 2

	Prob.	CAS #	CON #	ROUT	K	DK	#HIG	TILT	%	CON	CIR	IV
1.	30	54411120	15776	NBS49K	77	29	2	0	74	48	10	8
2.	30	56253646	18412	NBS49K	75	31	2	0	74	48	10	27
3.	30	5400806	16150	NBS49K	85	46	2	0	80	48	10	2
4.	20*	4912929	15753	NBS49K	23	69	1	0	74	55	5	14
5.	20	56875102	15775	NBS49K	72	37	3	0	74	52	5	4
6.	20	17057828	15754	NBS49K	67	37	3	0	74	52	5	14

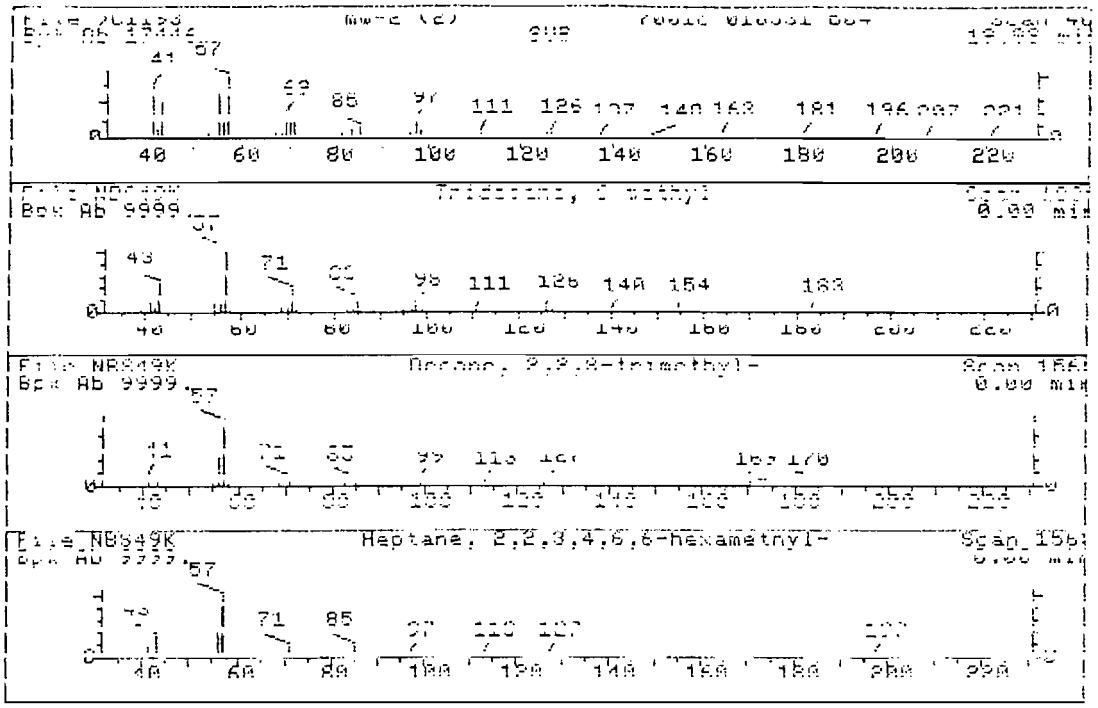


Instrument ID: 7881 Analyzed on: 4/09/01 13:41
Result 7 in PBM results file: LC1193
Retention Time: 18.87 Area: 1810018 Tentative Conc: 150.00
The unknown area is 297.90% of the nearest internal standard

1.	Naphthalene, 1,2,3,4-tetrahydro-2-methyl-	146 C11H14
2.	Benzene, 4-pentenyl-	146 C11H14
3.	Benzeneacetic acid, 2-phenylethyl ester	240 C16H16O2
4.	2(1H)-Naphthalenone, 3,4-dihydro-	146 C10H10O
5.	Butanedioic acid, phenyl-	194 C10H10O4

Sample file: >C1193 Spectrum #: 454
Search speed: 1 Tilting option: N No. of ion ranges searched: 49

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	MON	C	R
1.	27*	3877198	18705	NBS49K	28	75	1	0	55	44	8	15
2.	25*	1075747	10825	NBS49K	44	60	3	0	110	43	8	3
3.	20	102205	10915	NBS49K	41	57	0	0	85	55	5	18
4.	20*	530938	18701	NBS49K	29	60	1	0	49	51	5	16
5.	15	635518	10881	NBS49K	41	51	1	0	81	56	3	



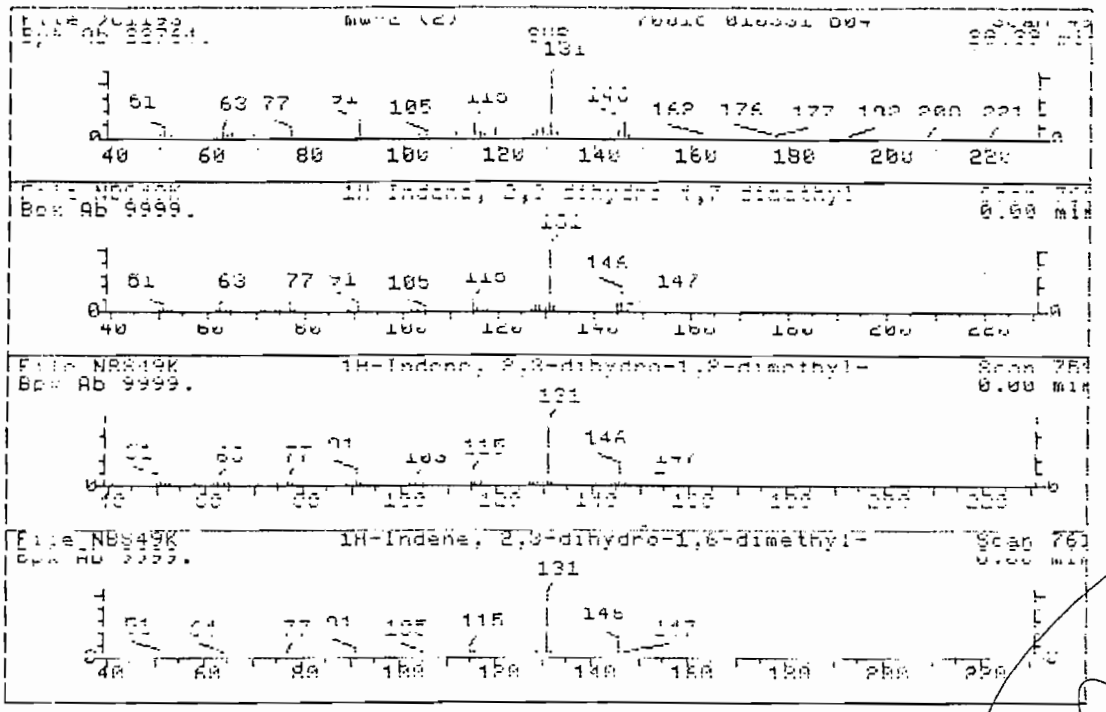
Instrument ID: 7081 Analyzed on: 4/09/01 13:41
Result 8 in PBM results file: LC1193
Retention Time: 19.08 Area: 8e5572 Tentative Conc: 21.00
The unknown area is 142.46% of the nearest internal standard

1.	Tridecane, 6-methyl-	198 C14H30
2.	Decane, 2,2,8-trimethyl-	184 C13H28
3.	Heptane, 2,2,3,4,6,6-hexamethyl-	184 C13H28
4.	Decane, 2,2,5-trimethyl-	184 C13H28
5.	Decane, 2,2,9-trimethyl-	184 C13H28
6.	1-Hexene, 3,5,5-trimethyl-	126 C9H18

HC

Sample file: >C1193 Spectrum #: 460
Search speed: 1 Tilting option: N No. of ion ranges searched: 50

	Prob.	CAS #	CON #	ROOT	K	DK	#FIG	TILT	%	CON	C	I	R	IV
1.	42	13287213	9529	NBS49K	61	44	1	0	67	28	14			9
2.	34	62238011	1208	NBS49K	39	48	0	0	75	38	14			21
3.	33	62108521	1211	NBS49K	46	41	1	0	68	33	12			16
4.	32	62237961	1202	NBS49K	34	52	0	0	70	38	10			18
5.	32	62238000	1207	NBS49K	34	52	0	0	69	40	10			18
6.	31*	4316658	3955	NBS49K	42	48	2	0	100	41	12			22



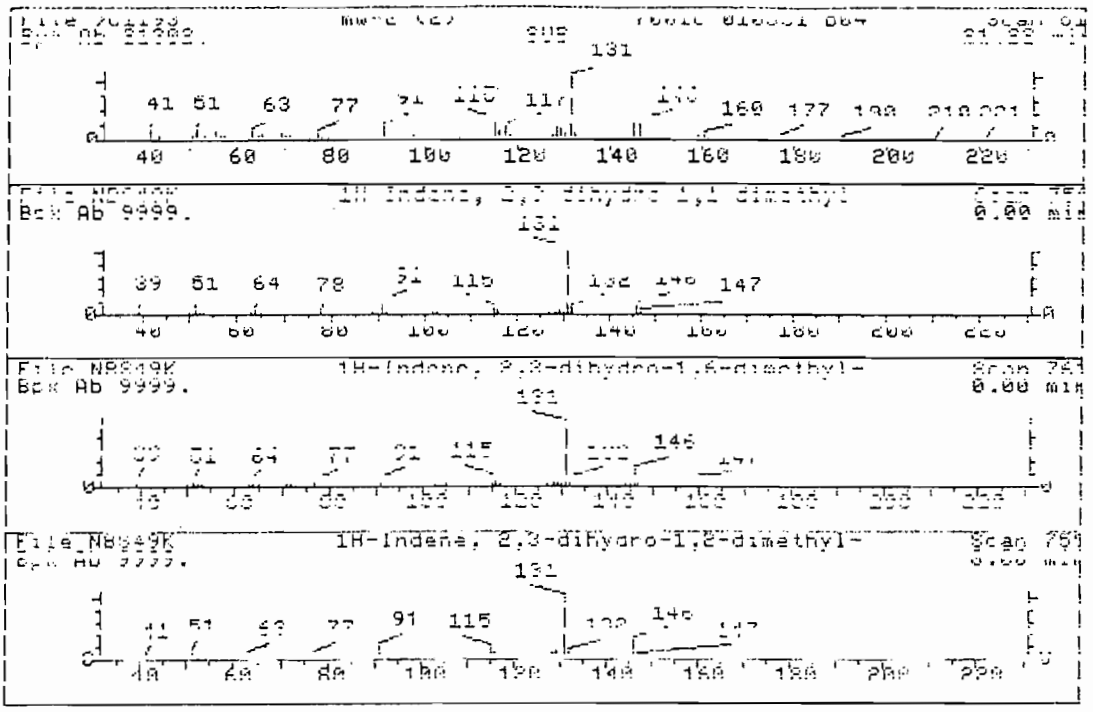
Clover

Instrument ID: 7001 Analyzed on: 4/09/11 13:4[illegible]
Result 9 in PBM results file: LC1193
Retention Time: 28.39 Area: 815158 Tentative Conc: 67.00
The unknown area is 134.16% of the nearest internal standard

1. 1H-Indene, 2,3-dihydro-4,7-dimethyl- 146 C11H14
2. 1H-Indene, 2,3-dihydro-1,2-dimethyl- 146 C11H14
3. 1H-Indene, 2,3-dihydro-1,6-dimethyl- 146 C11H14
4. 1H-Indene, 2,3-dihydro-4,6-dimethyl- 146 C11H14
5. 1H-Indene, 2,3-dihydro-1,3-dimethyl- 146 C11H14
6. Naphthalene, 1,2,3,4-tetrahydro-1-methyl- 146 C11H14

Sample file: >C1193 Spectrum #: 496
Search speed: 1 Tilting option: N No. of ion ranges searched: 53

	Prob.	CAS #	CON #	ROOT	K	DK	#FIX	TILT	%	CON	CUR	IV
1.	89*	6682719	15756	NBS49K	69	36	0	0	75	10	62	96
2.	86*	17057828	15754	NBS49K	82	22	1	0	88	7	59	78
3.	86*	17059482	15757	NBS49K	78	21	1	0	95	7	59	76
4.	83*	1685821	15755	NBS49K	59	41	0	0	67	15	51	
5.	81*	4175535	15758	NBS49K	60	41	0	0	66	17	45	
6.	74*	1559815	15752	NBS49K	68	36	2	0	88	14	39	



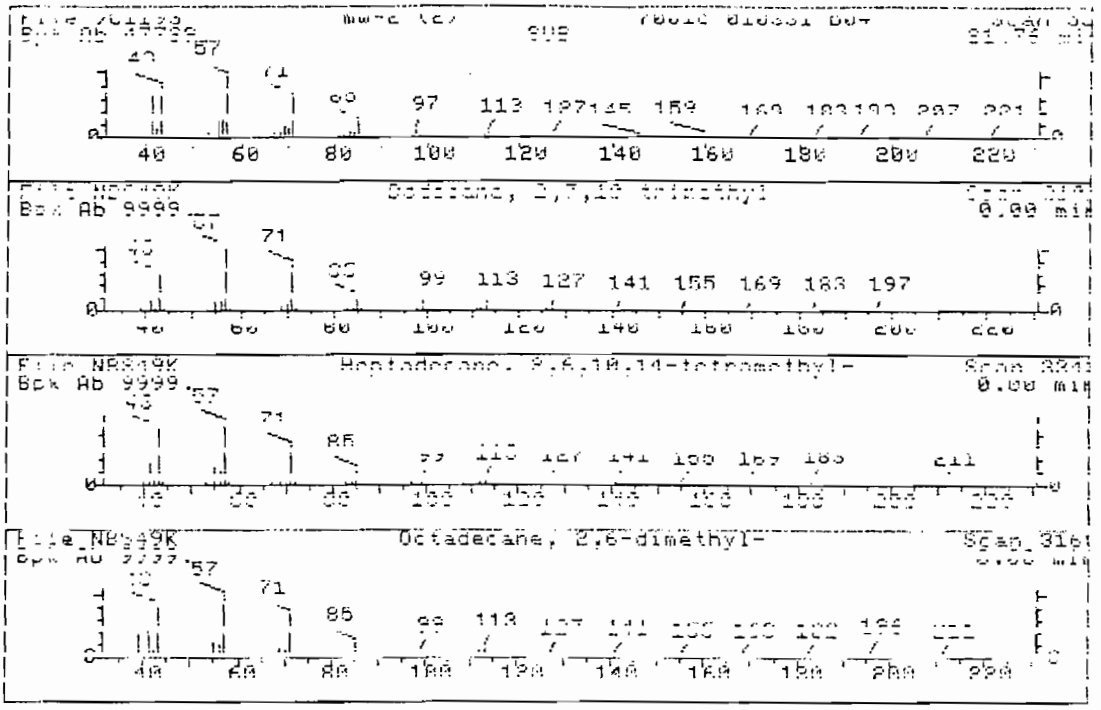
Instrument ID: 7001 Analyzed on: 4/09/01 13:41
Result 10 in PBM results file: LC1193
Retention Time: 21.22 Area: 1098269 Tentative Conc: 90.00
The unknown area is 180.76% of the nearest internal standard

1. 1H-Indene, 2,3-dihydro-1,1-dimethyl- 146 C11H14
2. 1H-Indene, 2,3-dihydro-1,6-dimethyl- 146 C11H14
3. 1H-Indene, 2,3-dihydro-1,2-dimethyl- 146 C11H14
4. Naphthalene, 1,2,3,4-tetrahydro-1-methyl- 146 C11H14
5. 1H-Indene, 2,3-dihydro-1,3-dimethyl- 146 C11H14
6. 1H-Indene, 2,3-dihydro-4,7-dimethyl- 146 C11H14

Clove

Sample file: >C1193 Spectrum #: 519
Search speed: 1 Tilting option: N No. of ion ranges searched: 45

	Prob.	CAS #	CON #	REMT	K	DK	#Fits	TILT	%	CON	C	R	IO
1.	65*	4912929	15753	NB549K	45	47	0	0	92	35	24		33
2.	65*	17059482	15757	NB549K	47	52	0	0	69	31	24		55
3.	64*	17057878	15754	NB549K	64	40	2	0	89	24	28		43
4.	58*	1559815	15752	NB549K	52	52	2	0	92	20	25		22
5.	49*	4175535	15758	NB549K	48	53	1	0	74	26	19		27
6.	49*	6682719	15756	NB549K	48	57	1	0	79	26	19		27

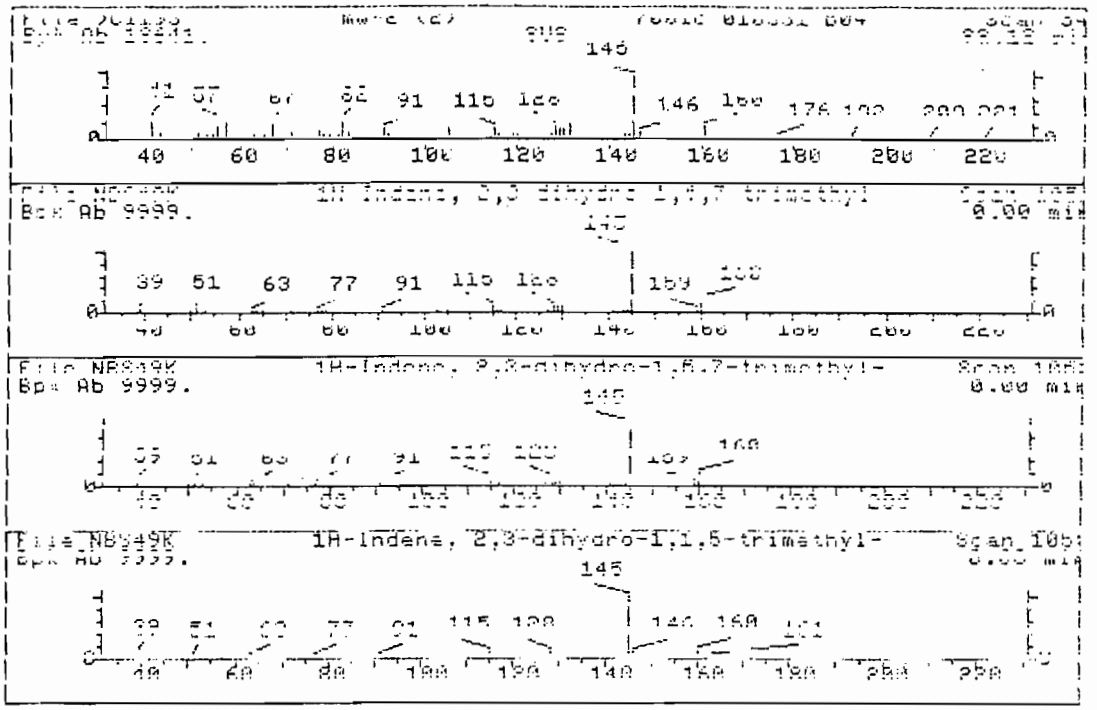


Instrument ID: 7001 Analyzed on: 4/09/01 13:41
Result 11 in PBM results file: LC1193
Retention Time: 21.76 Area: 197689 Tentative Conc: 160.00
The unknown area is 317.02% of the nearest internal standard

1. Dodecane, 2,7,10-trimethyl- 212 C15H32
2. Heptadecane, 2,6,10,14-tetramethyl- 296 C21H44
3. Octadecane, 2,6-dimethyl- 282 C20H42
4. 1-IODO-2-METHYLUNDECANE 296 C12H25I
5. Heptadecane, 2,6-dimethyl- 268 C19H40
6. Dodecane, 2,6,11-trimethyl- 212 C15H32

Sample File: >C1193 Spectrum #: 534
Search speed: 1 Tilting option: N No. of ion ranges searched: 11

	Prob.	CAS #	CON #	RUN	K	DK	#FLG	TIF	%	CON	CIR	IO
1.	84	74645980	4422	NBS49K	81	28	0	0	69	10	55	68
2.	79	18344371	6880	NBS49K	77	52	1	0	78	8	48	31
3.	78	75163972	12512	NBS49K	70	71	2	0	92	0	55	16
4.	78	73105676	9952	NBS49K	71	63	3	0	96	3	55	
5.	70	54105678	4437	NBS49K	76	42	2	0	99	10	42	
6.	70	31295564	4421	NBS49K	61	45	2	0	84	7	42	17



Instrument ID: 7001 Analyzed on: 4/09/01 13:41
Result 12 in PBM results file: LC1193
Retention Time: 22.12 Area: 1499412 Tentative Conc.: 120.00
The unknown area is 246.78% of the nearest internal standard

1. 1H-Indene, 2,3-dihydro-1,4,7-trimethyl- 160 C12H16
2. 1H-Indene, 2,3-dihydro-1,5,7-trimethyl- 160 C12H16
3. 1H-Indene, 2,3-dihydro-1,1,5-trimethyl- 160 C12H16
4. Naphthalene, 1,2,3,4-tetrahydro-1,1-dimethyl- 160 C12H16
5. Benzene, (1,3-dimethyl-2-butenyl)- 160 C12H16
6. Benzene, 1-(1-methylethenyl)-2-(1-methylethyl)- 160 C12H16

Sample file: >C1193 Spectrum #: 544
Search speed: 1 Tilting option: N No. of ion ranges searched: 2

	Prob.	CAS #	CON #	NAME	K	DK	#FLG	TILT	%	CON	C	R	IO
1.	69*	54340823	18575	NBS49K	63	>1	1	0	91	31	26	60
2.	62*	54340884	18577	NBS49K	56	36	1	0	99	29	25	44
3.	59*	40651417	18584	NBS49K	52	40	1	0	88	25	27	39
4.	56*	1985597	18579	NBS49K	57	36	2	0	100	32	24	41
5.	55*	50704013	18582	NBS49K	52	56	2	0	74	25	22	32
6.	53*	5567937	18585	NBS49K	51	52	2	0	67	25	24	25

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3(1)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-3(1)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1154
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	8.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	46.	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-3(1)

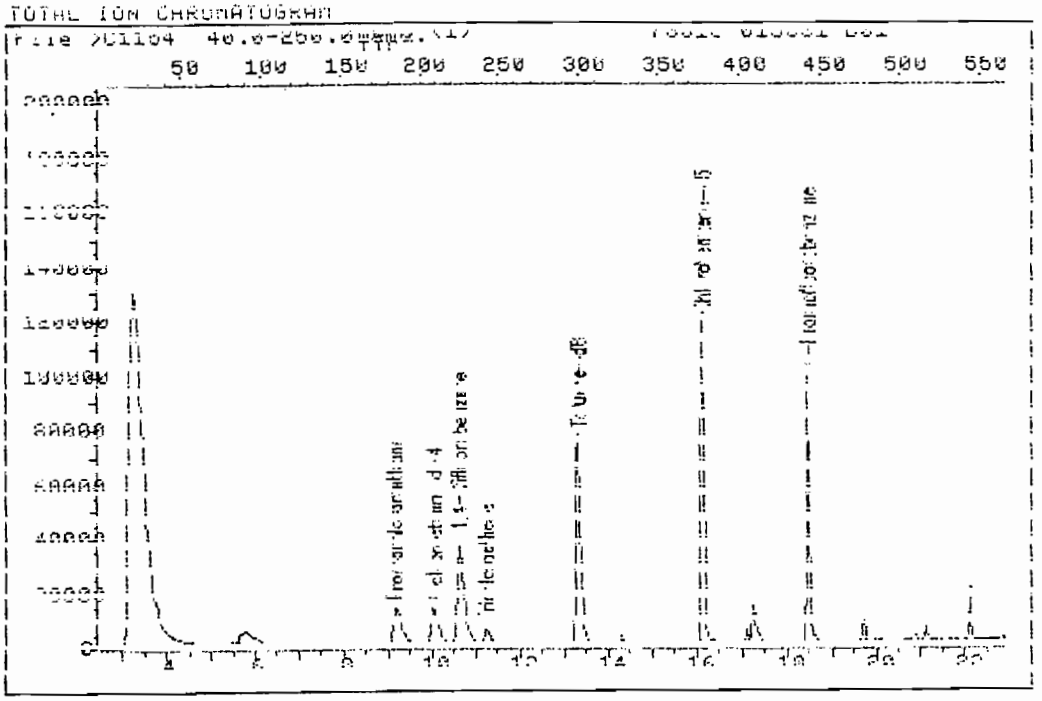
Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-3(1)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1154
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		oxygenated compound	17.27	11.	
2.		oxygenated compound	22.11	6.	
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

TOTAL ION CHROMATOGRAM

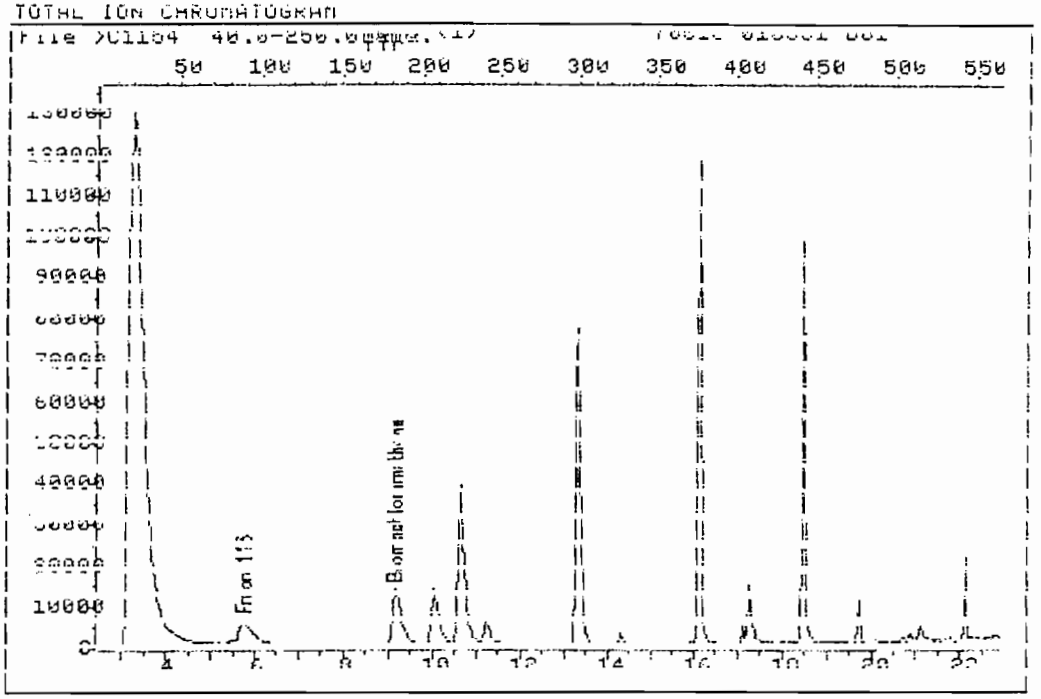


Data File: >C1154::03 Quant Output File: ^C1154::QT
Name: mw-3 (1) Instrument ID: /h01 (.
Misc: 7001c 010331 b01

Id File: luS91L.::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Qcal Time: **:**06 09:??

Operator ID: MANAGER
Quant Time : 010406 11:??
Injected at: **0406 10:57

TOTAL ION CHROMATOGRAM



Data File: >C1154::03 Quant Output File: 'C1154::QT
Name: mw-3 (1) Instrument ID: .301 1.
Misc: 7001c 010331 b01

Id File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **.0406 10:02

Operator ID: MANAGER
Quant Time : 010423 13:57
Injected at: **0406 10:57

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 010406 11:21
Output File: ^C1154::QT Injected at: **0406 10:57
Data File: >C1154::03 Dilution Factor: 1.00000
Name: mw-3 (1) Instrument ID: 7001 C
Misc: 7001c 010331 b01

ID File: ID591C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:51 Last Qcal Time: **0406 09:53

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.13	128.0	14259	50.00	ug	91
19)	1,2-Dichloroethane-d4	10.03	65.0	62262	47.65	UG	73
22)	*1,4-Difluorobenzene	10.61	114.0	121882	50.00	ug	99
29)	Trichloroethene	11.22	130.0	5151	7.69	UG	99
36)	*Chlorobenzene-d5	16.12	117.0	140113	50.00	ug	94
47)	Toluene d-8	13.31	98.0	174377	50.30	UG	1
48)	Bromofluorobenzene	18.46	95.0	84352	51.98	ug	

* Compound is ISTD

QUANT REPORT Page 1

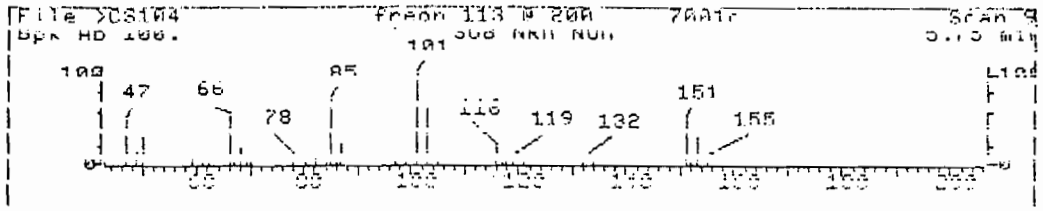
Operator ID: MANAGER Quant Rev: 7 Quant Time: 010423 1:59
Output File: 'C1154::QT Injected at: **0406 10:57
Data File: >C1154::D3 Dilution Factor: 1.000000
Name: mw-3 (1) Instrument ID: 7001 C
Misc: 7001c 010331 b01

IU File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **0406 15:22

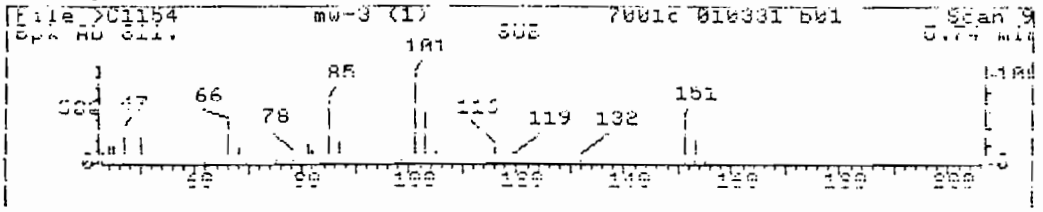
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.13	128.0	14799	50.00	UG	99
2)	Freon 113	5.24	101.0	19533	46.74	UG	98

* Compound is ISTD

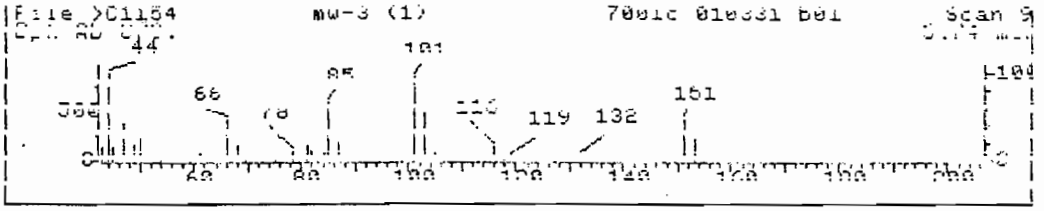
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

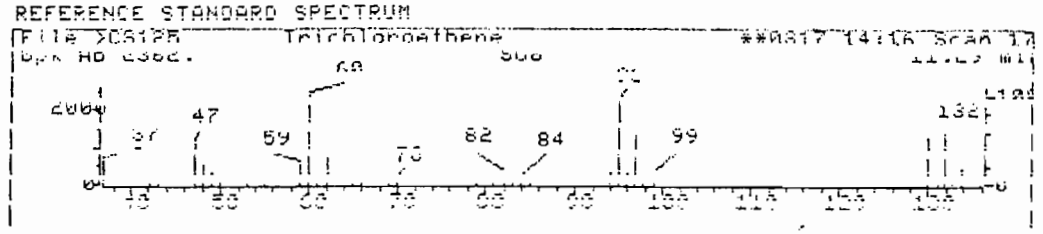


Data File: >C1154::03
Name: mw-3 (1)
Misc: 7001c 010331 b01
Quant Time: 010423 13:59
Injected at: **0406 10:57
Last Qcal Time: **0406 15:22

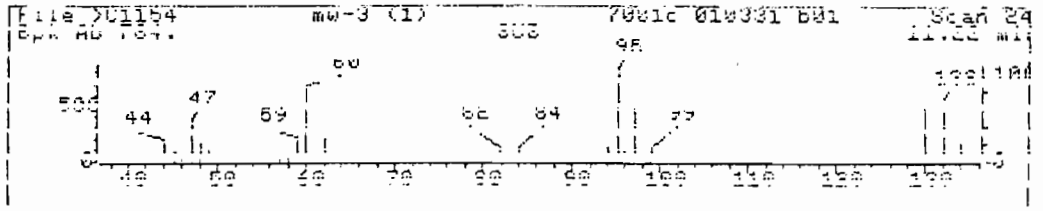
Quant Output File: 'C1154::QT
Instrument ID: >001
Quant ID File: DF113::DF
Last Calibration: :

Compound No : 2
Compound Name : Freon 113
Scan Number : 90
Retention Time: 5.24 min.
Quant Ion : 101.0
Area : 1955
Concentration : 45.24 UG
q-value : 98

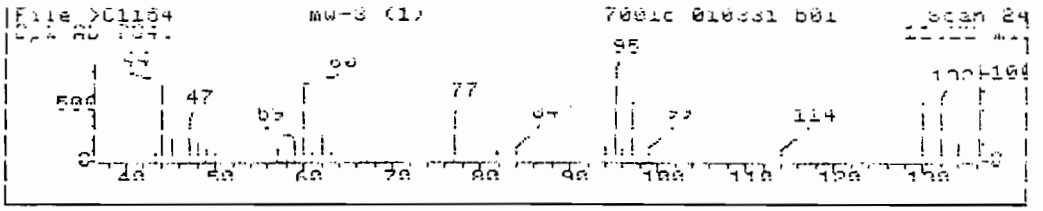
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



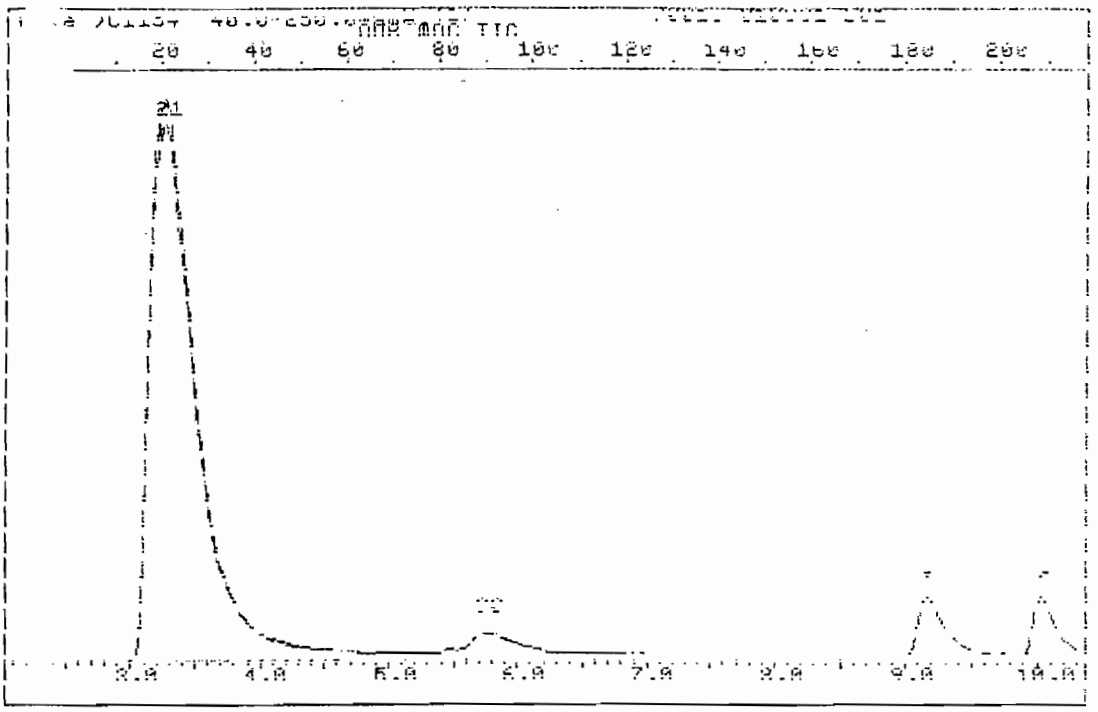
SAMPLE SPECTRUM (UNALTERED)

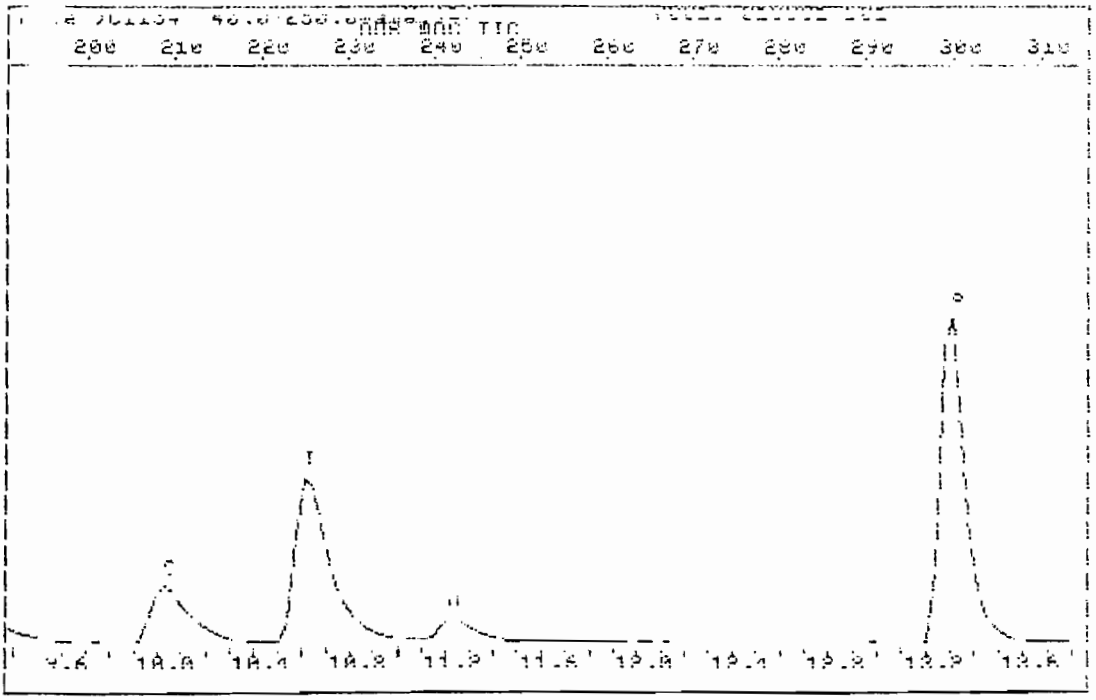


Data File: >C1154::03
Name: mw-3 (1)
Misc: 7001c 010331 b01
Quant Time: 010406 11:21
Injected at: **0406 10:57
Last Qcal Time: **0406 09:53

Quant Output File: ^C1154::QT
Instrument ID: 7001 L
Quant ID File:]...91C.::MT
Last Calibration: 000810 08:51

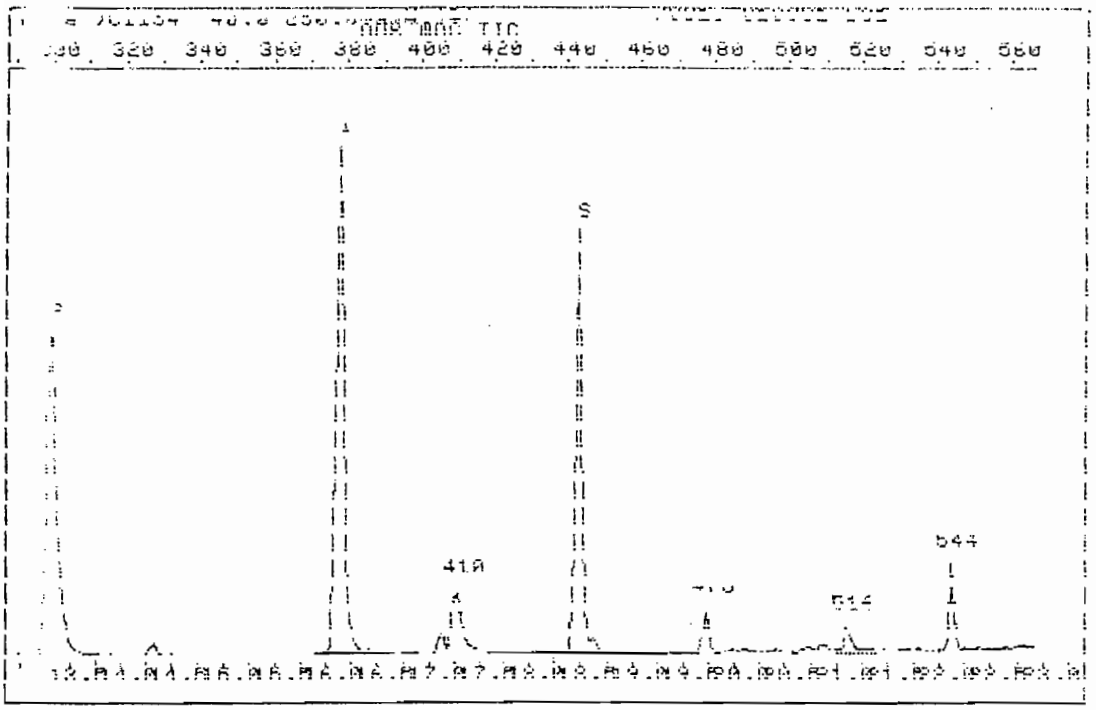
Compound No : 29
Compound Name : Trichloroethene
Scan Number : 242
Retention Time: 11.22 min.
Quant Ion : 130.0
Area : 51:1
Concentration : 7.69 UG
q-value : 99



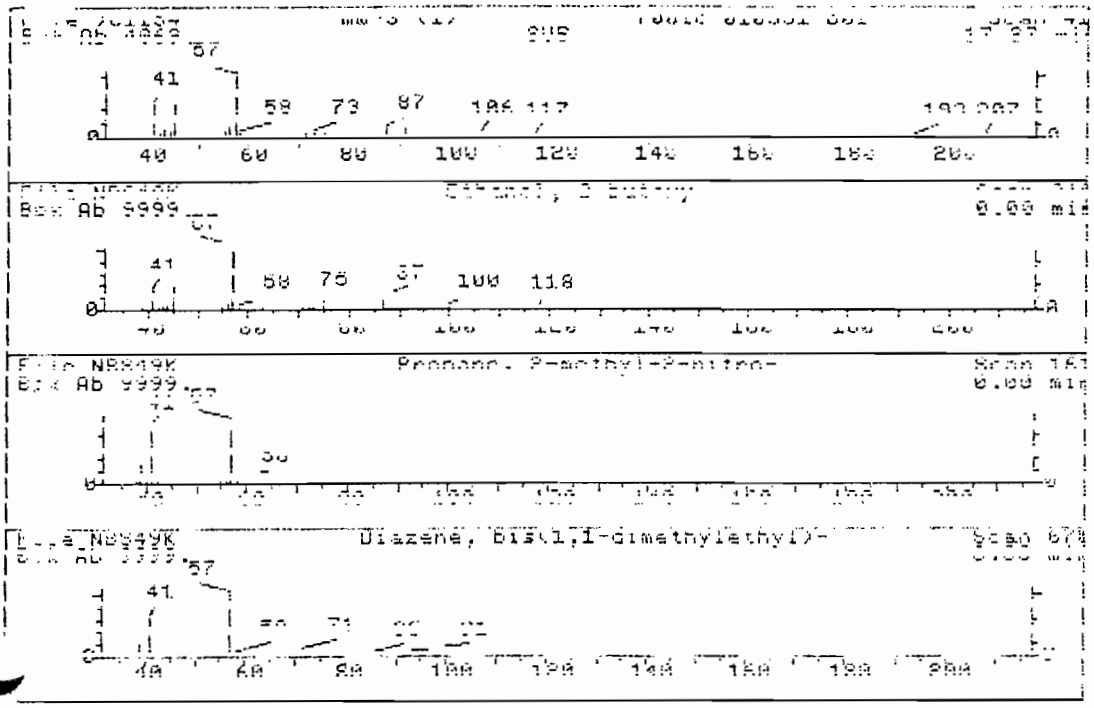


Instrument ID: Zinit Analyzed on: 4/06/01 10:57

```
MS data file header from : >L1154::03

Sample: mw-3 (1)                Operator: MANAGER   SUPER VAP.    4/0n.01 10:1?
Misc  : 7001c 010331 b01
Sys. #:    1  MS model:  70  SW/HW rev.: LF   Aux #  :  0     Equip ID: 7001  C
  Method file: METH03    Tuning file: MT9003    No. of extra records:  2
 Source temp.:   N/A  Analyzer temp.:  N/A      Transfer line temp. :   0

      Chromatographic temperatures :  45.   2?0.   ?00.     0.      0.
      Chromatographic times, min.  :  3.0   33.0   5?.0    0.0     0.0
      Chromatographic rate, deg/min:  8.0     .1    0.0     .2      0.0


>1.1154         mw-3 (1)              7001c 010331 b01
  40.01 ?50.0 LLP FIC
Upslope:  .2000 Area Reject:    19?2?. Max Peaks:  6  Bunch: -1 Valley ?100 %
Dnslope: 0.0000 Results File (C:)54  Sorted by Time/Area       INT

Peak    R.T.    first    max     last     peak      raw       corr.     corr.     % of
  #     min.    scan     scan    scan     height    area      area    % max.      total
---   ------   -----   -----   -----   ------   -------   -------   -------   -------
  1     3.25      12      21      ?4    129?10   3291?89   3252?09    100.00    88.6.?
  2     5.74      ?8      90     110      5302    2?6445    141?50*     4.34     3.844
  3    17.27     402     410     420     14?67    171422    1?50?2     4.15     3.6.:
  4    19.23     474     478     481     10152     55928     5?5?8     1.19     1.052
  5    21.10     513     516     ?24      5229     ?2658     3????4      .9?      .8.?

  6    22.11     540     544     550     20827    114251     ?1?75     2.20     1.951

                          Sum of corrected areas:     ?669??8.

      Summary of Unknowns PBM Library Search and Quantitation

                                                Retention       Unknown
      Standard   Concentration    Area           Time          Window
      --------   -------------  ---------    ---------    ------------------
         1            50.0       197272.        9.13      2.53 -    9.87
         2            50.0       407140.       10.61      9.87 -   1?.3?
         3            50.0       607150.       16.12     13.36 -   22.90

   Dilution Factor =     1.00          This sample was 1000.00  g or ml

 Correction Factor =     1.00

                          (Conc Int Std * Area Unknown)
Unknown Concentration =   |----------------------------| * Correction Factor
                          |        Area Int Std        |

                                                4:18 PM  MON., 23  APR., 2001
```



Instrument ID: 7011 Analyzed on: 4/16/11 10:57



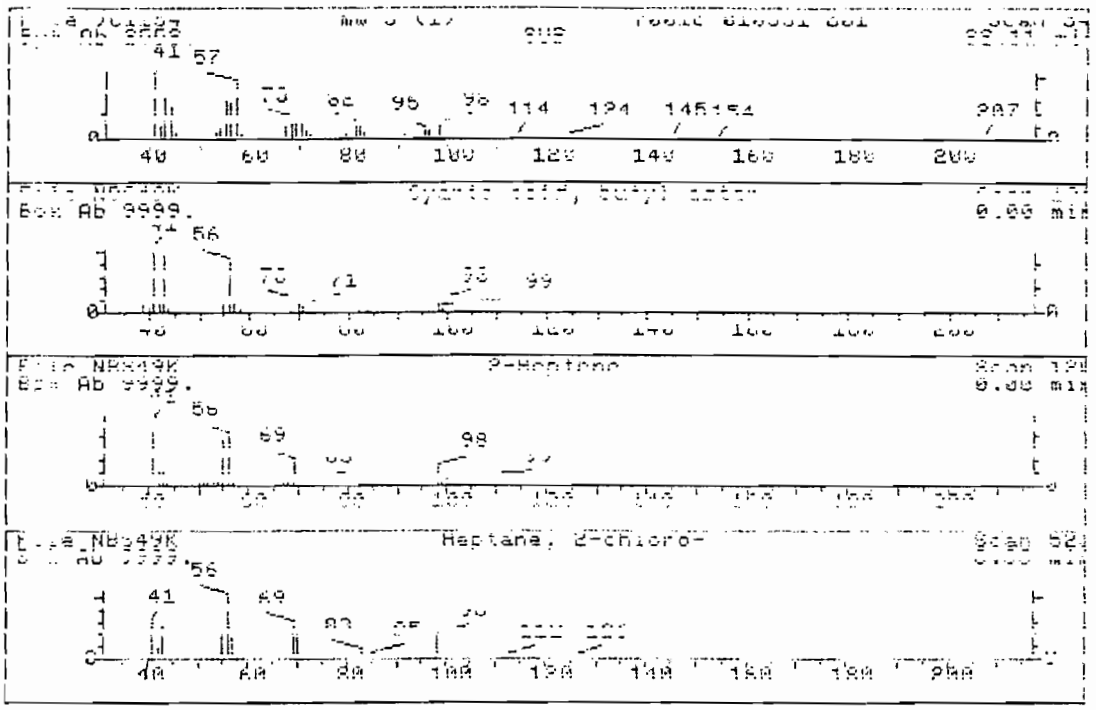
oxygenated

Instrument ID: 7011 Analyzed on: 4/16/11 10:57
Result > in PRM results file: C1154
Retention Time: 12.27 Area: 15918? Tentative Conc: 11.00
The unknown area is 22.2?% of the nearest internal standard

1.	Ethanol, 2-butoxy-	118 C6H14O2
2.	Propane, 2-methyl-2-nitro-	11? C4H9NO2
3.	Diazene, bis(1,1-dimethylethyl)-	14? C8H18N2
4.	Butane, 2-bromo-	136 C4H9Br

Sample file: >C1154 Spectrum #: 411
Search speed: 1 Filtering option: N No. of ion ranges searched: -?

	Prob.	CAS #	CON #	Root	K	OK	#Hits	Tit	%	Con	C	R
1.	53	111?62	7?69	NBS49K	44	43	0	0	68	24	22	??
2.	25	594?07	1259	NBS49K	3R	44	1	0	100	46	?	14
3.	25	9278?3	12?0	NBS49K	?6	45	0	0	69	48	?	??
4.	25	78?62	1268	NBS49K	26	5?	0	0	91	4R	?	1?



Instrument ID: 7001 Analyzed on: 4/18/01 11:57
Result 4 in PRM results file: C1154
Retention Time: 22.11 Area: 21525 Tentative Conc: 6.111
The unknown area is 11.79% of the nearest internal standard

1.	Cyanic acid, butyl ester	99 C5H9NO
2.	2-Heptene	98 C7H14
3.	Heptane, 2-chloro-	134 C7H15Cl
4.	Aziridine, 2-ethyl-	71 C4H9N
5.	Hexanal, 5-methyl-	114 C7H14O
6.	1-Heptene	98 C7H14

Sample file: >C1154 Spectrum #: 544
Search speed: 1 Tilting option: N No. of ion ranges searched: 14

	Prob.	CAS #	CON #	NIST	K	DK	#Hits	Tilt	%	CON	C I R IV
1.	21*	1768747	1046	NBS49K	58	64	0	0	61	60	5
2.	18*	592778	1041	NBS49K	57	39	0	0	69	65	5
3.	18	10018944	9972	NBS49K	42	41	0	0	46	59	4
4.	15*	2549629	3873	NBS49K	28	55	0	0	39	61	3
5.	15*	1860395	9918	NBS49K	54	70	3	0	66	60	3
6.	15*	592767	3851	NBS49K	31	67	1	0	58	57	3

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-3(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1175
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	2.	BJ
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	8.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	30.	

1E

EPA SAMPLE NO.

MW-3(2)

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

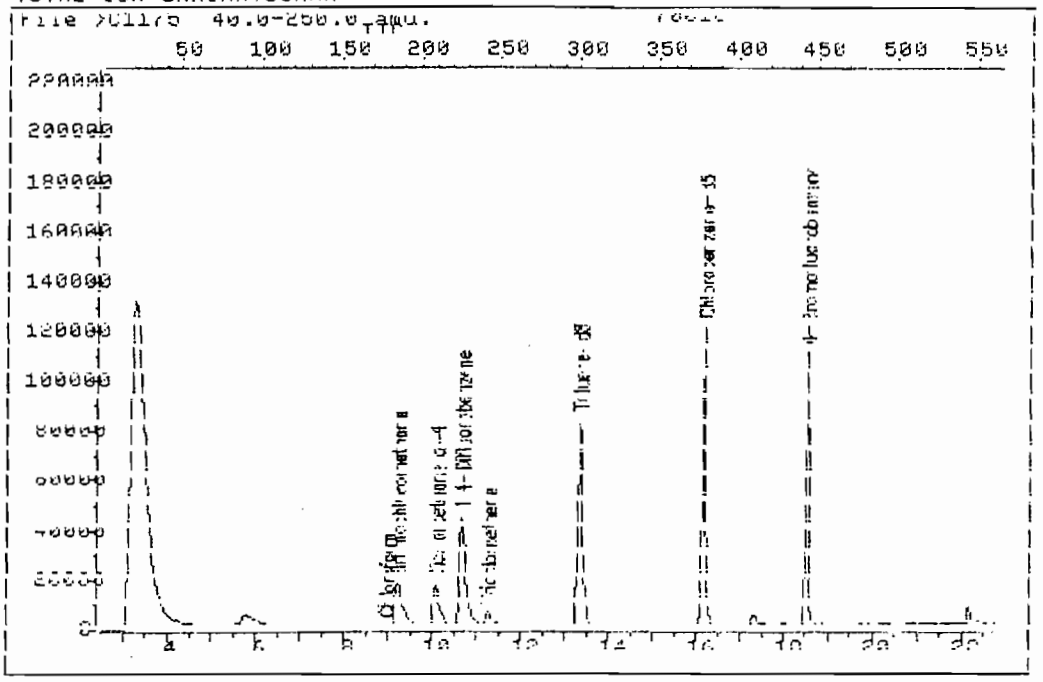
Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-3(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1175
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

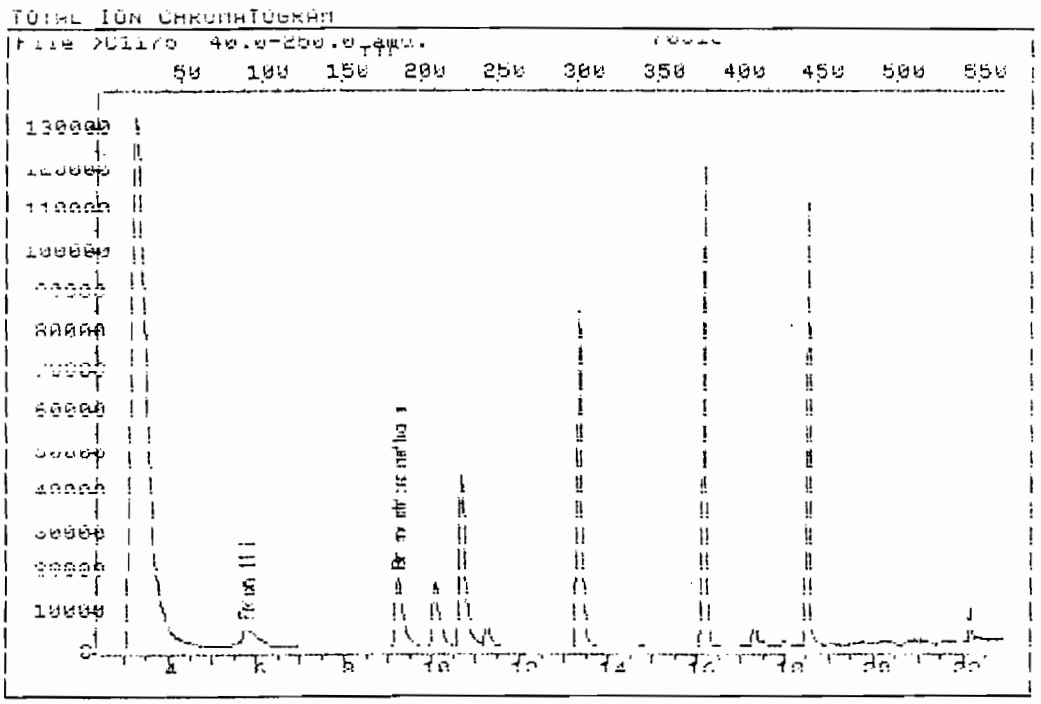
TOTAL ION CHROMATOGRAM



Data File: >C1175::03 Quant Output File: ^C1175::01
Name: MW-3(2)
Misc: 7001c 010331/65

Id File: 10591C::MI
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Qual Time: **0406 09:[illegible]

Operator ID: MANAGER
Quant Time : 010406 21:58
Injected at: **0406 21:15



Data File: >C1:[75::]03
Name: MW-3(2)
Misc: 7001c 010331B5

Id File: IDF113::M1
Title: Freon 113 ID File
Last Calibration: :

Operator ID: MANAGER
Quant Time : 010423 14:1?
Injected at: **0406 21:15

Quant Output File: [C1:[75::]QT
Instrument ID: ?001 1.
Last Qcal Time: **0406 15:?

QUANT REPORT

Operator ID: MANAGER
Output File: ^C1175::QT
Data File: >C1175::D3
Name: MW-3(2)
Misc: 7001c 010331B5

Quant Rev: 7 Quant Time: 04:406 21:58
Injected at: **0406 21:15
Dilution Factor: 1.0000
Instrument ID: 7001 C

ID File: ID591C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Qcal Time: **0406 09:53

	Compound	R.T.	Q ion	Area	Conc	Units	%
1)	*Bromochloromethane	9.21	128.0	18381	50.00	UG	
18)	Chloroform	8.96	83.0	2584	1.53	UG	86
19)	1,2-Dichloroethane-d4	10.08	65.0	74217	45.60	UG	
22)	*1,4-Difluorobenzene	10.66	114.0	139041	50.00	UG	95
29)	Trichloroethene	11.27	130.0	6885	8.16	UG	93
36)	*Chlorobenzene-d5	16.17	117.0	148415	50.00	UG	94
42)	Toluene d-8	13.32	98.0	188799	51.41	UG	
48)	Bromofluorobenzene	18.51	95.0	90781	52.81	UG	76

* Compound is ISTD

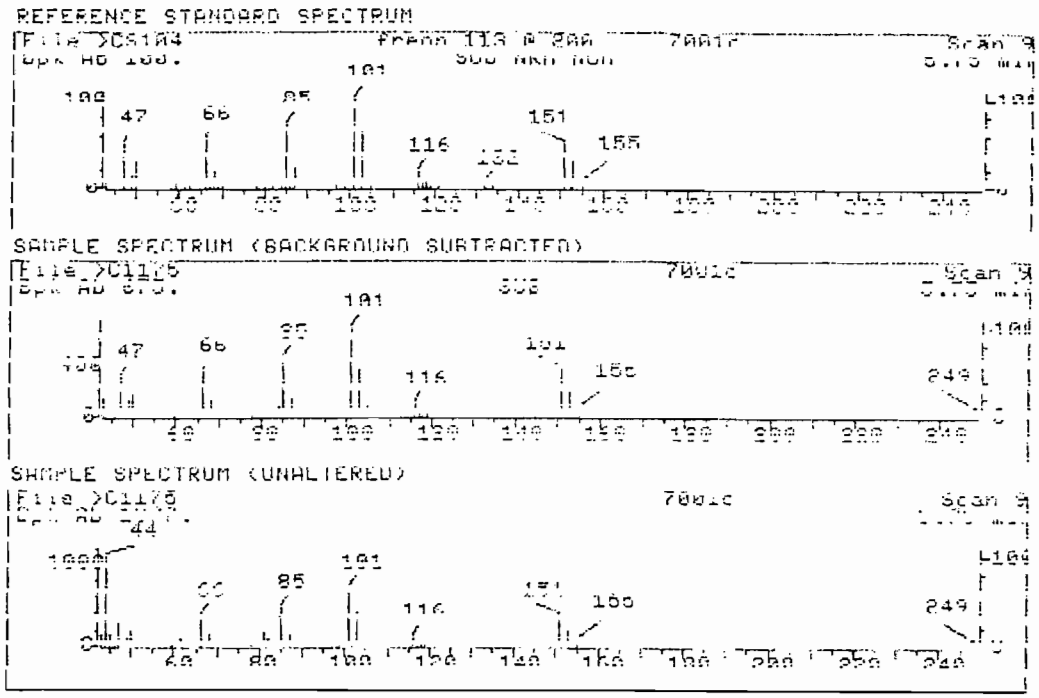
QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 01-23 14:02
Output File: 'C1175::QT Injected at: **0406 21:15
Data File: >C1175::D3 Dilution Factor: 1.0000
Name: mw-3(2) Instrument ID: 7001 C
Misc: 7001c 010331 B5

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **0406 15:22

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.21	128.0	18328	50.00	ug	77
2)	Freon 113	5.25	101.0	19652	29.51	ug	93

* Compound is ISTD

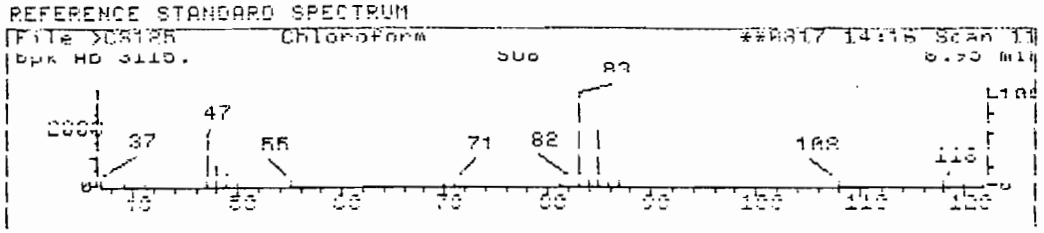


Data File: >C1175::03
Name:
Misc: 7001c
Quant Time: 010423 14:02
Injected at: **0406 21:15
Last Qcal Time: **0406 15:22

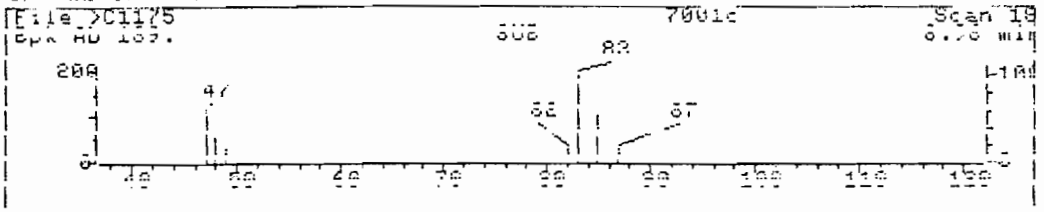
Quant Output File: 'C1175::QT
Instrument ID: >n01
Quant ID File: ID#113::MT
Last Calibration: :

Compound No : 2
Compound Name : Freon 113
Scan Number : 91
Retention Time: 5.75 min.
Quant Ion : 101.0
Area : 19652
Concentration : 29.51
q-value : 93

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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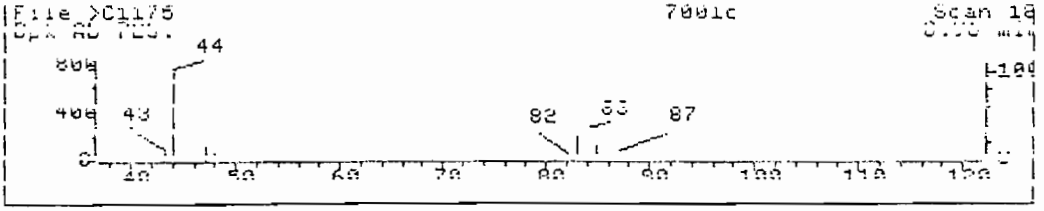
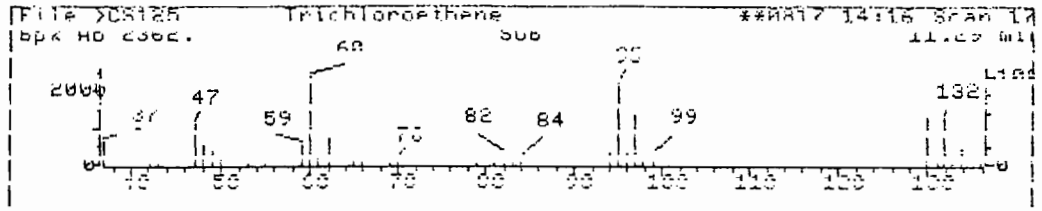


Data File: >C1175::D3
Name:
Misc: 7001c
Quant Time: 010406 21:38
Injected at: **0406 21:15
Last Qcal Time: **0406 09:53

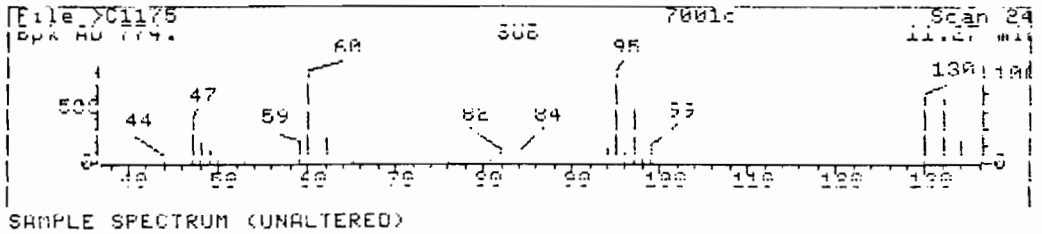
Quant Output File: ^C1175::QT
Instrument ID: /H01 C
Quant ID File: ID591C::MT
Last Calibration: 00/04/10 08:11

Compound No : 18
Compound Name : Chloroform
Scan Number : 80
Retention Time: 8.96 min.
Quant Ion : 83.0
Area : 2584
Concentration : 1.53 ug
q-value : 86

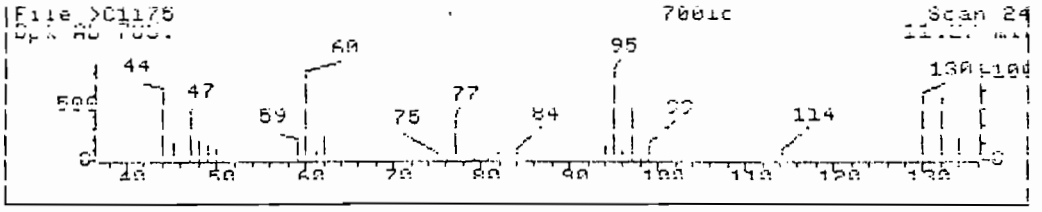
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >C1175::D3
Name:
Misc: 7001c
Quant Time: 010406 21:58
Injected at: **0406 21:15
Last Qcal Time: **0406 09:53

Quant Output File: ^C1175::QT
Instrument ID: [illegible]001
Quant ID File: IDS91C::MT
Last Calibration: [illegible]

Compound No : 29
Compound Name : Trichloroethene
Scan Number : 744
Retention Time: 11.27 min.
Quant Ion : 131.0
Area : 6035
Concentration : 8.16 [illegible]
q-value : 93

MS data file header from : >C1175::03

Sample: MW-3(2) Operator: MANAGER SUPER GRP. 4/08/01 21:5
Misc : 7001c 331 B5
Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7001 C
Method file: METH03 Tuning file: MT9003 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	230.	230.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0

>C1175 7001c
40.01 250.0 CLP TIC
Upslope: .2000 Area Reject: 23913. Max Peaks: 4 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IC1175 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	3.27	14	22	67	132255	326[illegible]85	3221699	100.00	94.3[illegible]
2	5.79	80	92	112	4411	214958	112324	3.49	3.289
3	17.32	408	412	425	4623	105112	45985	1.43	1.347
4	22.16	543	546	549	8108	69183	35110	1.09	1.028

Sum of corrected areas: 3415118.

Summary of Unknowns PBM Library Search and Quantitation

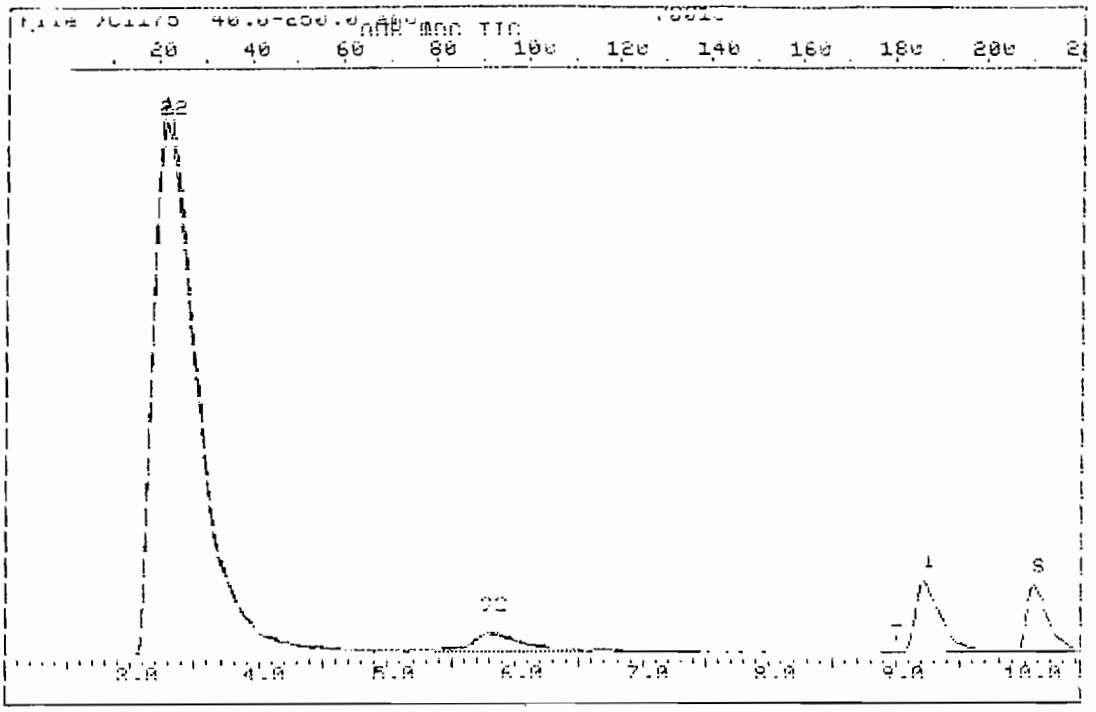
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	235131.	9.21	2.51 - 9.93
2	50.0	461221.	10.66	9.93 - 13.41
3	50.0	636204.	16.12	13.41 - 22.[illegible]

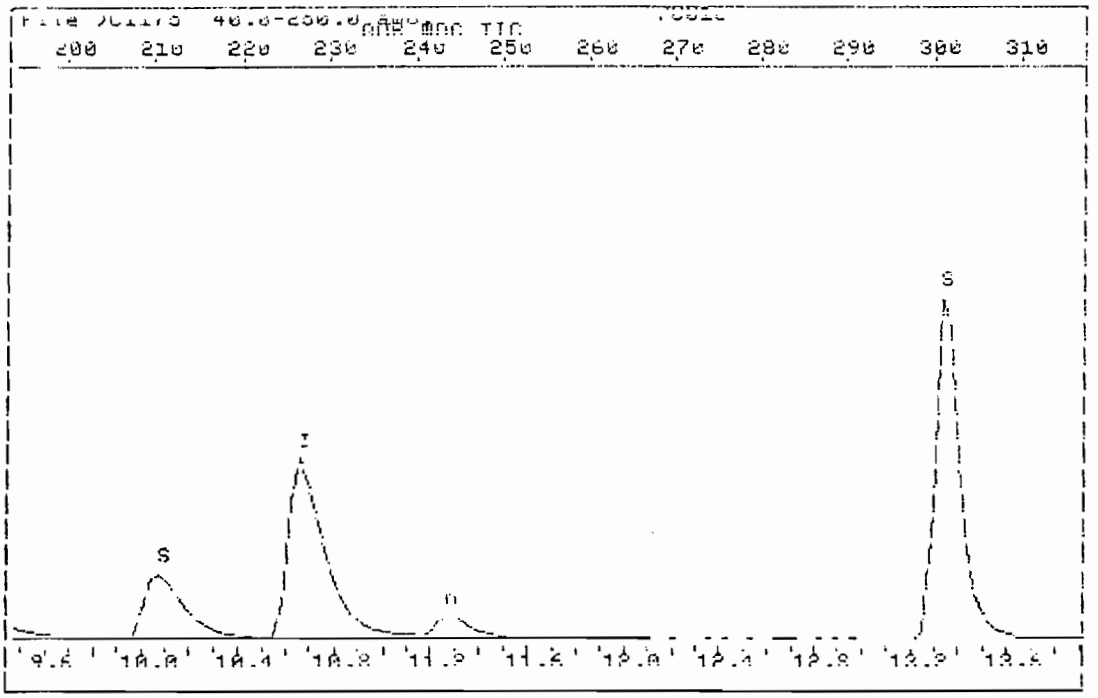
Dilution Factor = 1.00 This sample was 1000.00 g or mL

Correction Factor = 1.00

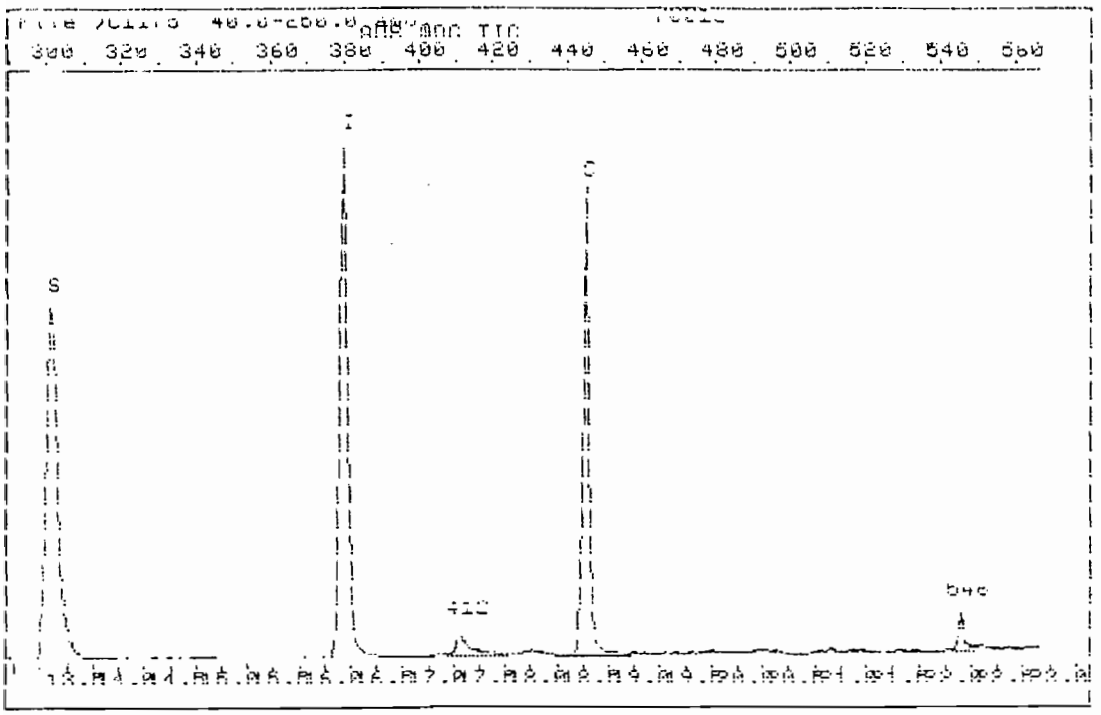
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

9:55 AM TUE., 8 MAY , 2001





Instrument ID: 7011 Analyzed on: 4/16/01 21:15



Instrument ID: 70nt Analyzed on: 4/16/01 21:15

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-3(3)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-3(3)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1165
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	9.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	46.	

1E

EPA SAMPLE NO.

MW-3(3)

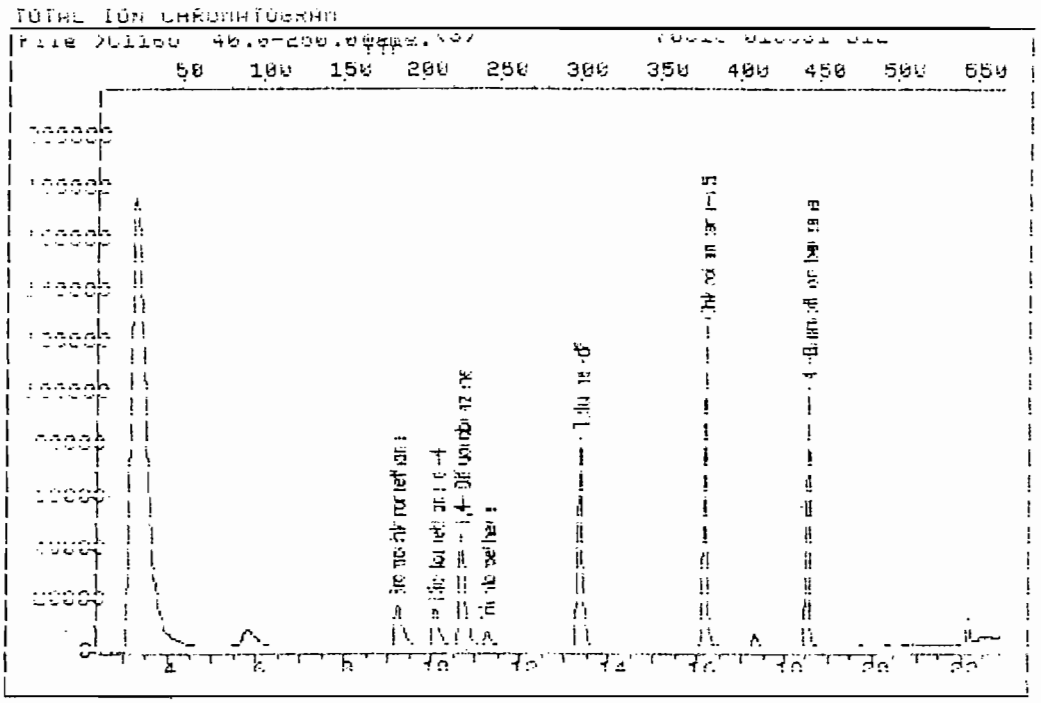
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-3(3)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1165
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

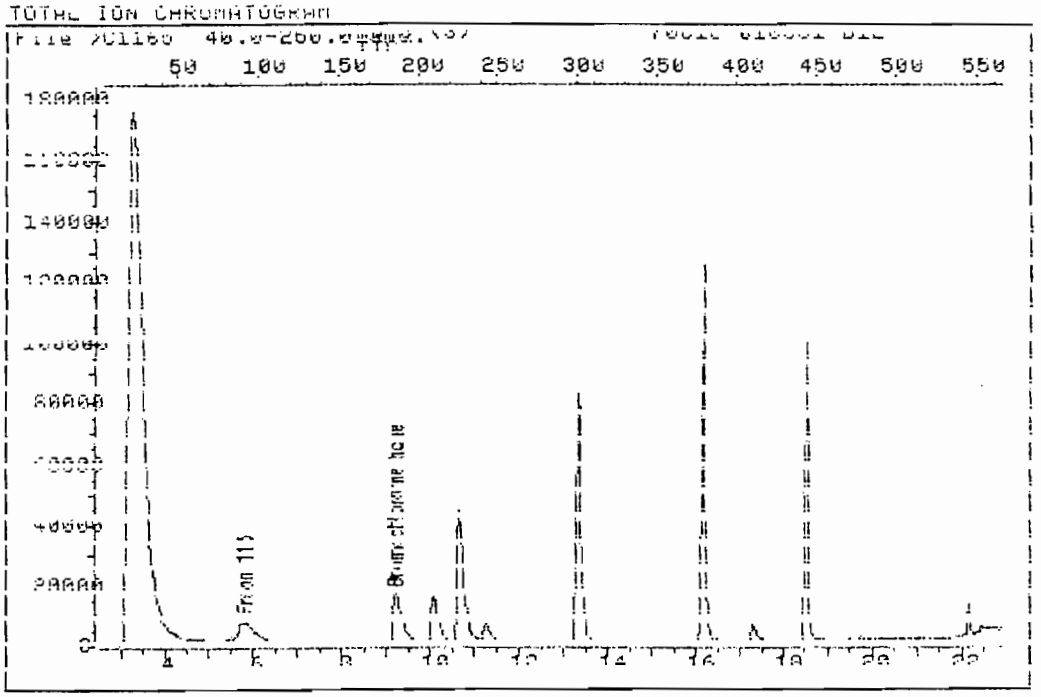


Data File: >C:\165::03 Quant Output File: >C:\165::QT
Name: mw-3 (3) Instrument ID: >\01 \.
Misc: 7001c 010331 b12

Id File: 10591\.::MT
Title: HP 0\0A Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Qcal Time: **\-\6 09:\>

Operator ID: MANAGER
Quant Time : 010\06 16:\-
Injected at: **0406 16:21

TOTAL ION CHROMATOGRAM



Data File: >C1165::03
Name: mw-3 (3)
Misc: 7001c 010331 b12

Quant Output File: 'C1165::QT
Instrument ID: 7801 1.

Id File: !UF11>::MT
Title: Freon 113 ID File
Last Calibration: :

Last Qcal Time: **0406 15:??

Operator ID: MANAGER
Quant Time : 010423 14:1?
Injected at: **0406 16:21

Operator ID: MANAGER Quant Rev: 7 Quant Time: 01-Feb-96 16:44
Output File: ^C1165::QT Injected at: **Feb-96 16:21
Data File: >C1165::03 Dilution Factor: 1.00000
Name: mw-3 (3) Instrument ID: 7000 C
Misc: 7000c 010>31 b12

ID File: ID591C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Qual Time: **Feb-96 09:53

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.18	128.0	18043	50.00	ug/L	100
19)	1,2-Dichloroethane-d4	10.08	65.0	25136	45.78	UG	21
22)	*1,4-Difluorobenzene	10.66	114.0	134591	50.00	ug/L	100
29)	Trichloroethene	11.27	130.0	6759	9.17	UG	92
36)	*Chlorobenzene-d5	16.17	117.0	146756	50.00	ug/L	99
47)	Toluene d-8	13.52	98.0	105726	51.15	UG	98
48)	Bromofluorobenzene	18.51	95.0	86267	50.76	ug/L	98

* Compound is ISTD

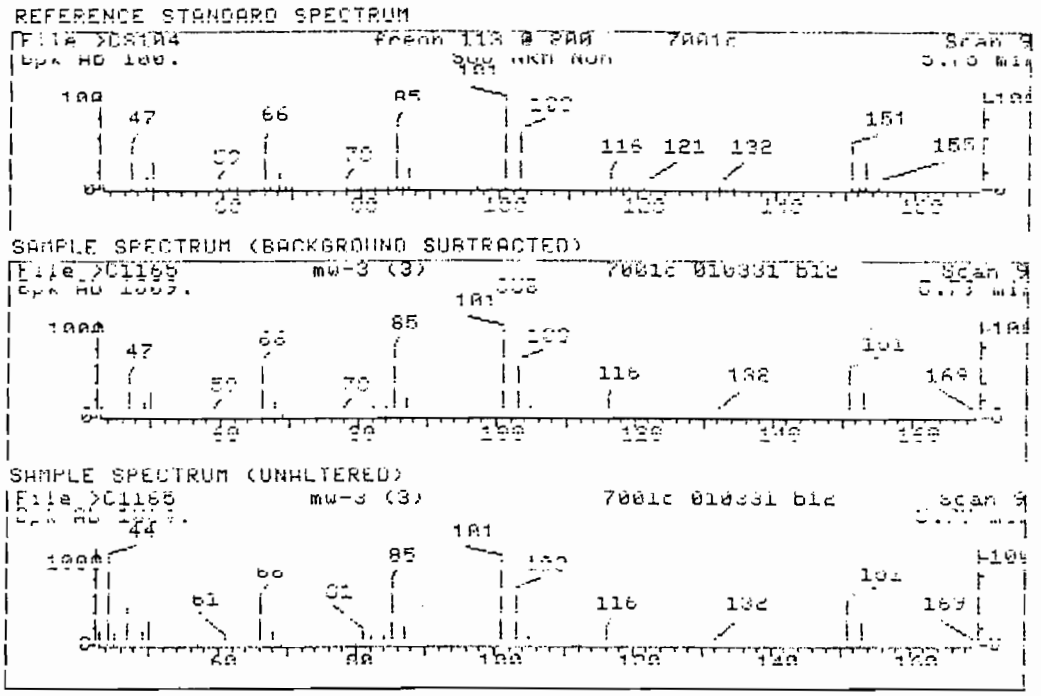
QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 010423 14:...
Output File: 'C1165::QT Injected at: **0406 16:21
Data File: >C1165::D3 Dilution Factor: 1.000000
Name: mw-3 (3) Instrument ID: 7001 C
Misc: 7001c 010331 b12

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **0406 15:22

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.18	128.0	18144	50.00	ng	...
2)	Freon 113	5.79	101.0	23931	45.85	ng	92

* Compound is ISTD

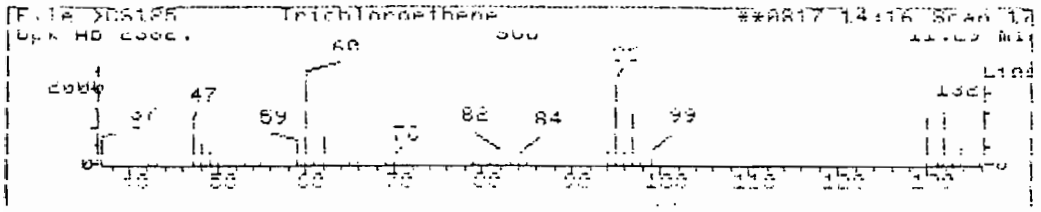


Data File: >C1165::03
Name: mw-3 (3)
Misc: 7001c 010331 b12
Quant Time: 010423 14:00
Injected at: **0406 16:21
Last Qcal Time: **0406 15:22

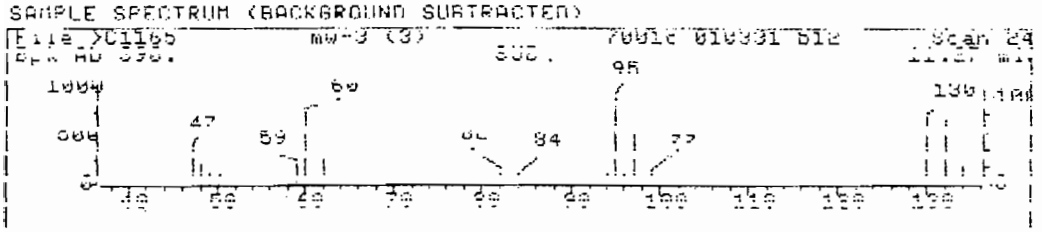
Quant Output File: 'C1169::QT
Instrument ID: 7001 1.
Quant ID File: [>113>::m1
Last Calibration: :

Compound No : 2
Compound Name : Freon 113
Scan Number : 92
Retention Time: 5.29 min.
Quant Ion : 101.0
Area : 239[illegible]
Concentration : 45.83 UG
q-value : 92

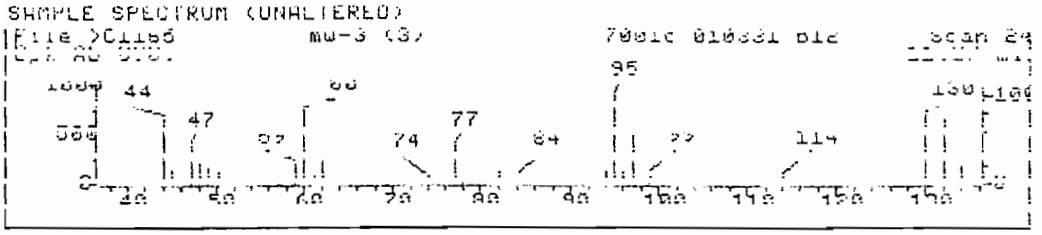
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

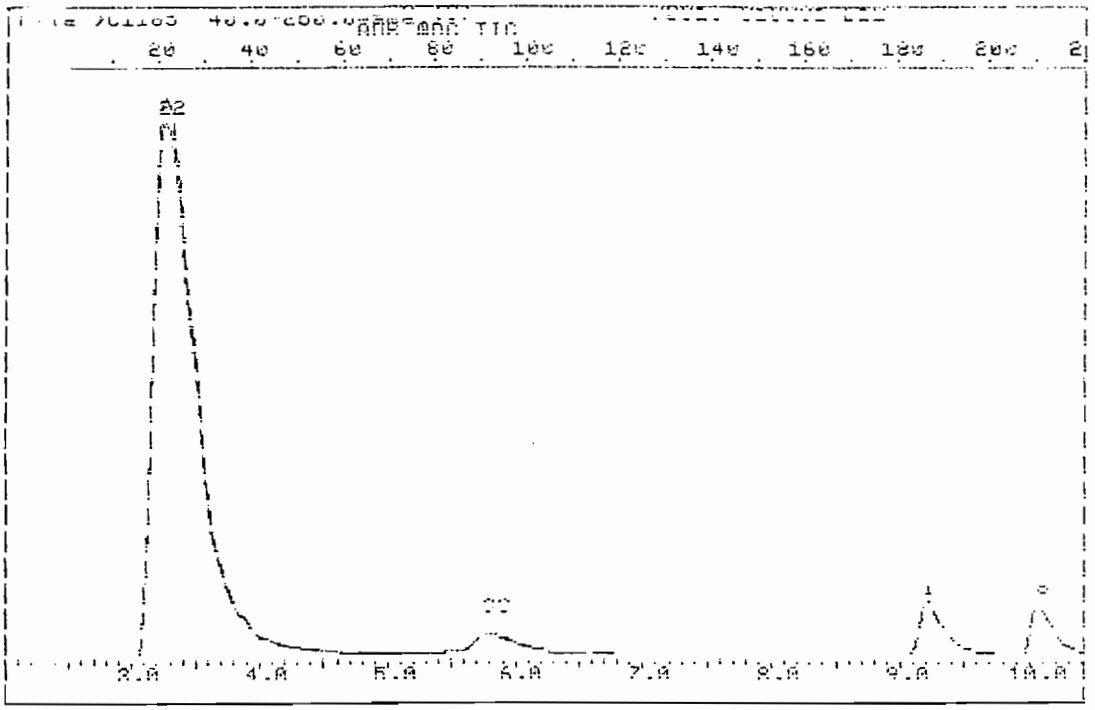


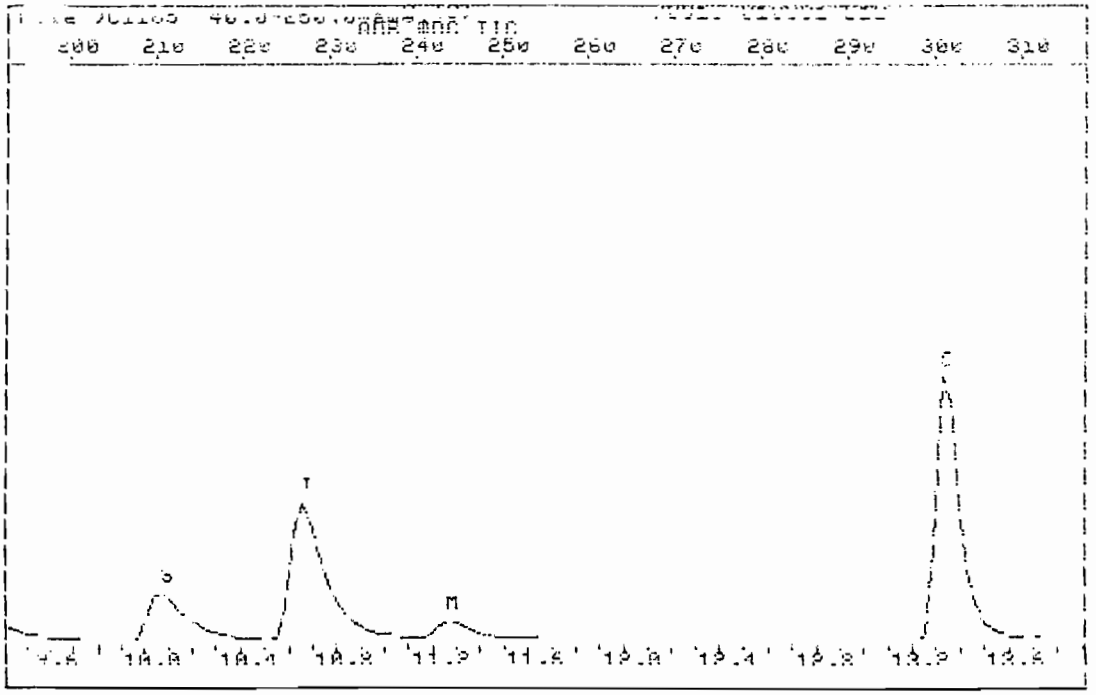
Data File: >C1165::03
Name: mw-3 (3)
Misc: 7001c 010331 b12
Quant Time: 010406 16:44
Injected at: **0406 16:21
Last Qcal Time: **0406 09:53

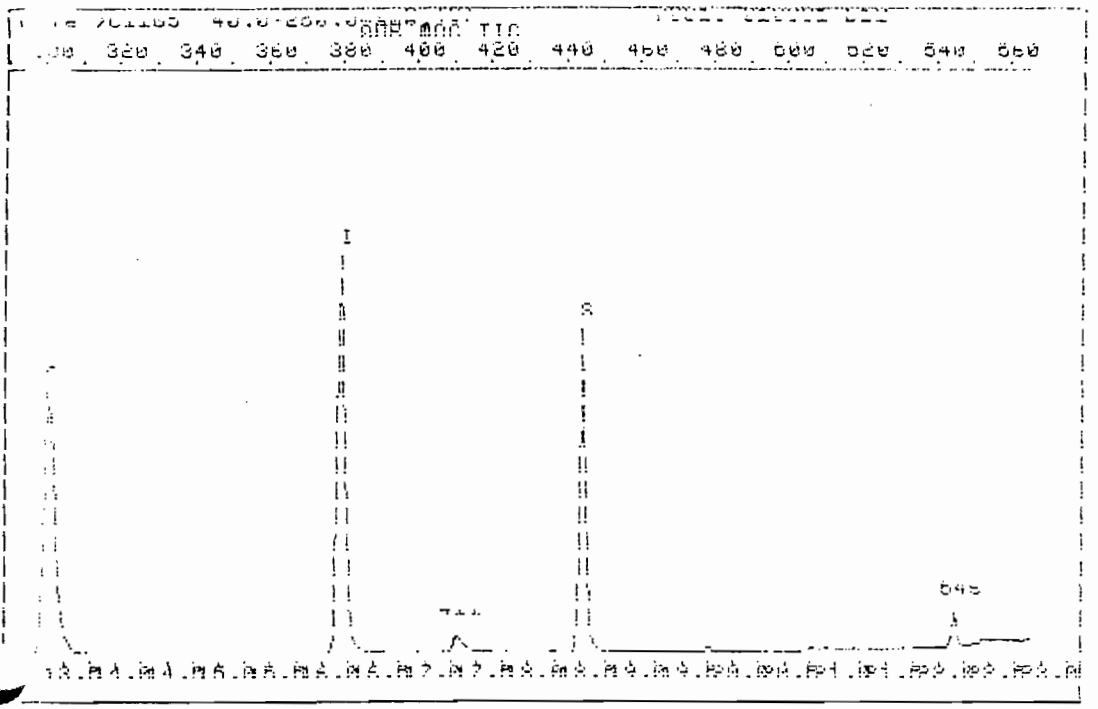
Quant Output File: >C1165::QT
Instrument ID: 7001 L
Quant ID File: [...]91C::IT
Last Calibration: 000810 08:31

Compound No : 29
Compound Name : Trichloroethene
Scan Number : 244
Retention Time: 11.27 min
Quant Ion : 130.0
Area : 67[illegible]
Concentration : 9.17 UG
q-value : 92

```
No data file header from : >1.1165::D3

Sample: mw-3 (3)              Operator: MANAGER   SUPER GRP.    4/0n.01 In: .
Misc  : 7001c 010331 b12
Sys. #:    1  MS model:  70  SW/HW rev.: LF  AIS #:  0    Equip ID: 7001  C
  Method file: METH03    Tuning file: MTY003   No. of extra records:  2
 Source temp.:   N/A  Analyzer temp.:  N/A     Transfer line temp. :   0

      Chromatographic temperatures :  45.   2>0.   2>0.     0.      0.
      Chromatographic times, min.  :  3.0   35.0   35.0    0.0     0.0
      Chromatographic rate, deg/min:  8.0     .1    0.0     .2      0.0


>1.1165        mw-3 (3)             7001c 010331 b12
  40.01 250.0 CLP TIC
Unslope:  .2000 Area Reject:   2>965. Max Peaks:  4  Bunch: -1 Valley >100 %
Unslope: 0.0000 Results File (C:)n5   Sorted by Time/Area       INT

Peak    R.T.   first    max    last     peak      raw      corr.     corr.     % of
  #     min.   scan     scan   scan     height    area     area    % max.     total
---   ------  -----   -----  -----   -------  -------  -------  --------  --------
  1     3.27      14      22     70     17476   426647   421709    100.00    93.9>
  2     5.82      79      93    114      6>54    2>261    17>91     4.17     3.916
  3    17.29     411     411    423      >868    96875    >>64     1.2>     1.1>>
  4    22.16     542     546    549     10644    8818>    4>69     1.00      .942

                          Sum of corrected areas:     448870>.

        Summary of Unknowns PBM Library Search and Quantitation

                                                Retention      Unknown
        Standard   Concentration    Area          Time          Window
        --------   -------------  ---------   ---------   ----------------
               1           50.0     2>965>.       9.18     >.>1 -    9.>>
               2           50.0     46>889.      10.66     9.>2 -   12.41
               3           50.0     64>85>.      16.12    12.41 -   2>.>0

   Dilution Factor =      1.00          This sample was 10000.00  g or mL

 Correction Factor =      1.00

                          |Conc Int Std * Area Unknown|
Unknown Concentration =   |---------------------------| * Correction Factor
                          |       Area Int Std        |

                                                6:01 PM  MON., 23  APR., 2001
```







Instrument ID: 7011 Analyzed on: 4/10/11 16:21

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-4(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1159
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	10.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

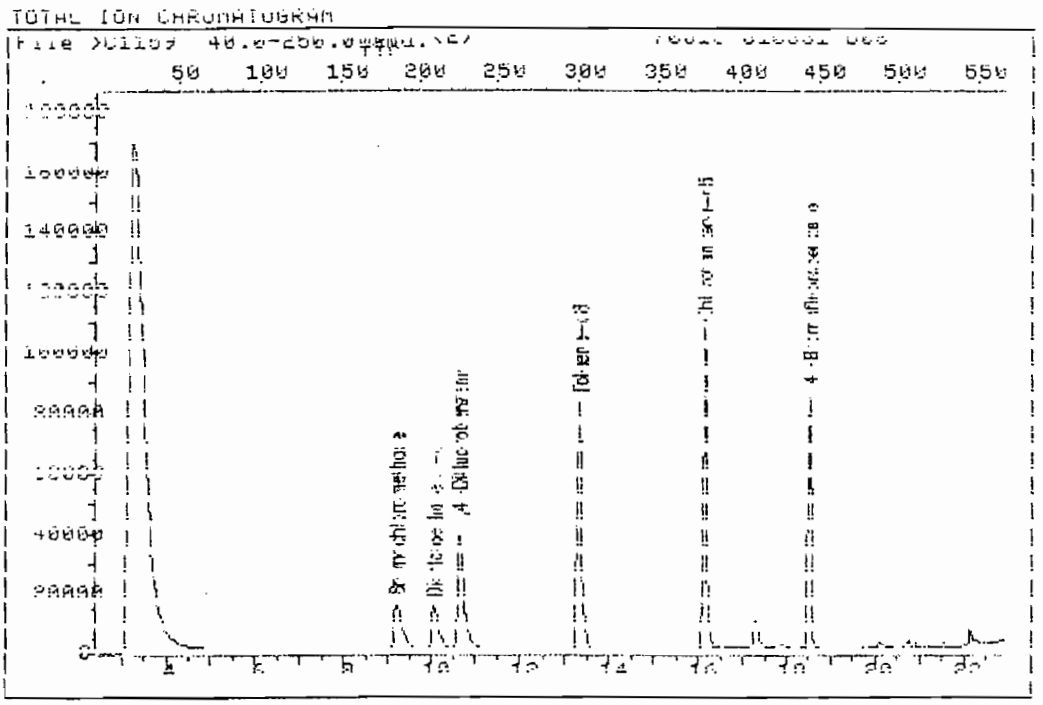
MW-4(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-4(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1159
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

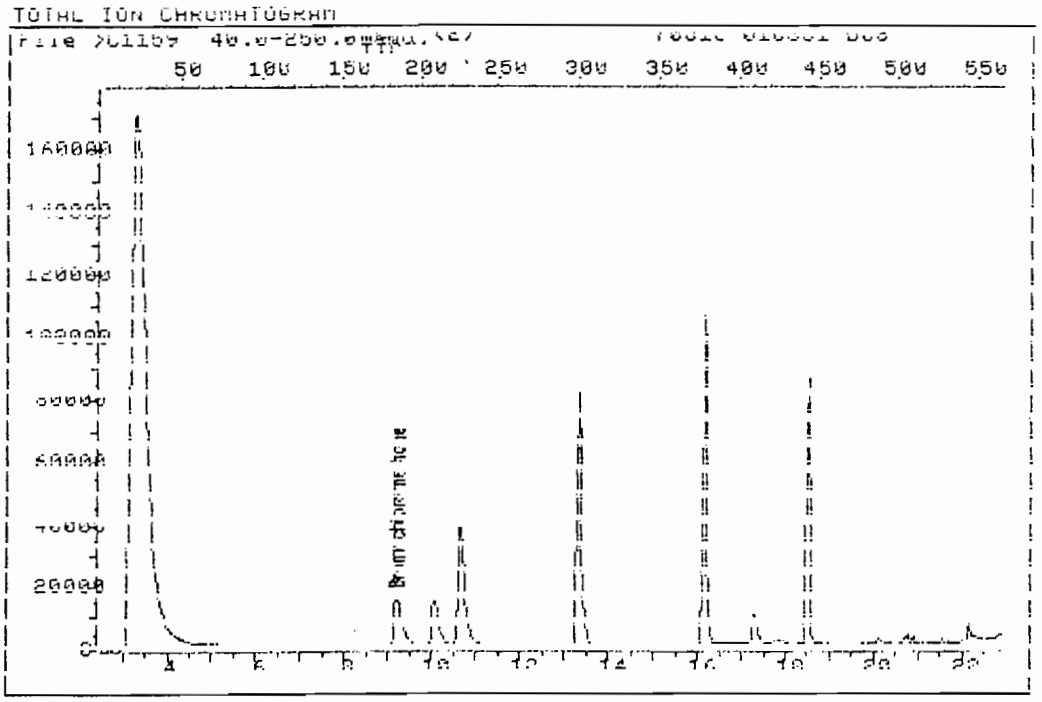
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Oxygenated compound	17.29	8.	J
2.		Unknown	22.12	5.	J
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					



Data File: >C1159::03 Quant Output File: ^C1159::QT
Name: mw-4 (2) Instrument ID: >H01 L
Misc: 70011c 010331 b06

Id File: IDS91L::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Qcal Time: **0406 09:5?

Operator ID: MANAGER
Quant Time : 010406 13:5?
Injected at: **0406 13:24



Data File: >C1159::03
Name: mw-4 (2)
Misc: 7001c 010331 b06

Quant Output File: 'C1159::QT
Instrument ID: 7001 t.

Id File: DF113::MT
Title: Freon 113 ID File
Last Calibration: :

Last Qual Time: **0406 13:24

Operator ID: MANAGER
Quant Time : 010423 13:24
Injected at: **0406 13:24

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 010406 15:4d
Output File: ^C1159::QT Injected at: **0406 13:24
Data File: >C1159::03 Dilution Factor: 1.000000
Name: mw-4 (2) Instrument ID: 7001 C
Misc: 7001c 010331 b06

ID File: IDS91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Qcal Time: **0406 09:53

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.18	128.0	17109	50.00	UG	96
19)	1,2-Dichloroethane-d4	10.04	65.0	62939	44.58	UG	73
22)	*1,4-Difluorobenzene	10.62	114.0	124914	50.00	UG	97
36)	*Chlorobenzene-d5	16.13	117.0	158442	50.00	UG	94
42)	Toluene d-8	13.32	98.0	178748	52.18	UG	98
48)	Bromofluorobenzene	18.51	95.0	85171	51.82	UG	9

* Compound is ISTD

QUANT REPORT Page 1

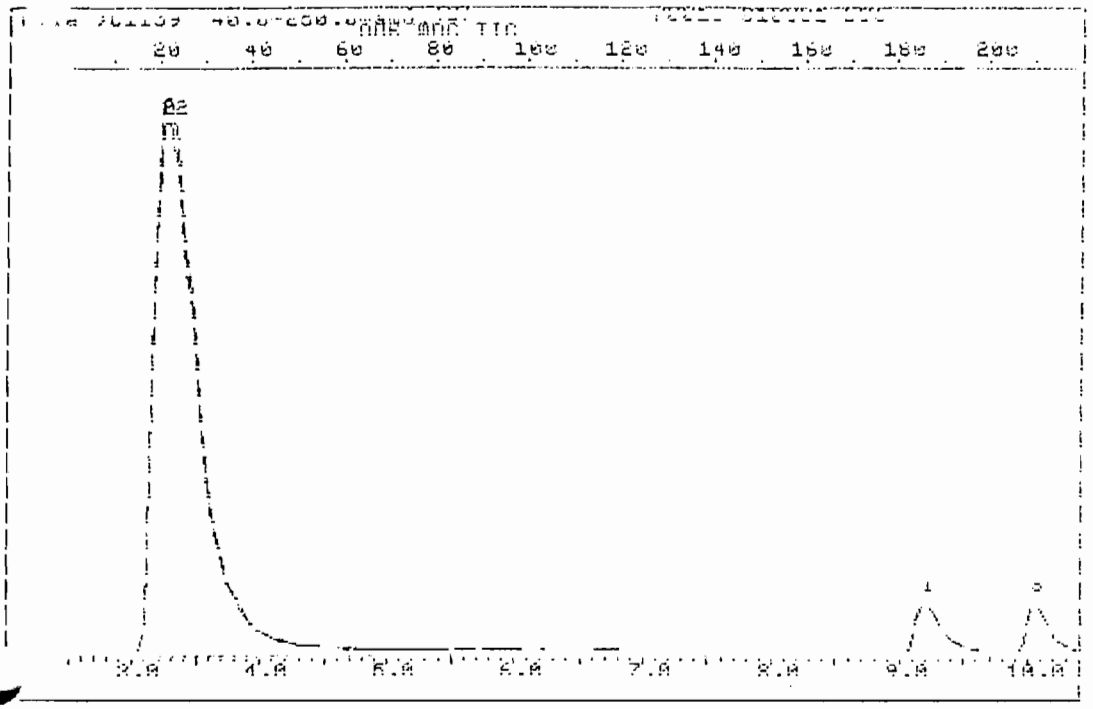
Operator ID: MANAGER Quant Rev: 7 Quant Time: 010493 13:59
Output File: 'C1159::QT Injected at: **0406 13:24
Data File: >C1159::03 Dilution Factor: 1.000000
Name: mw-4 (2) Instrument ID: 7000 C
Misc: 7001c 010331 b06

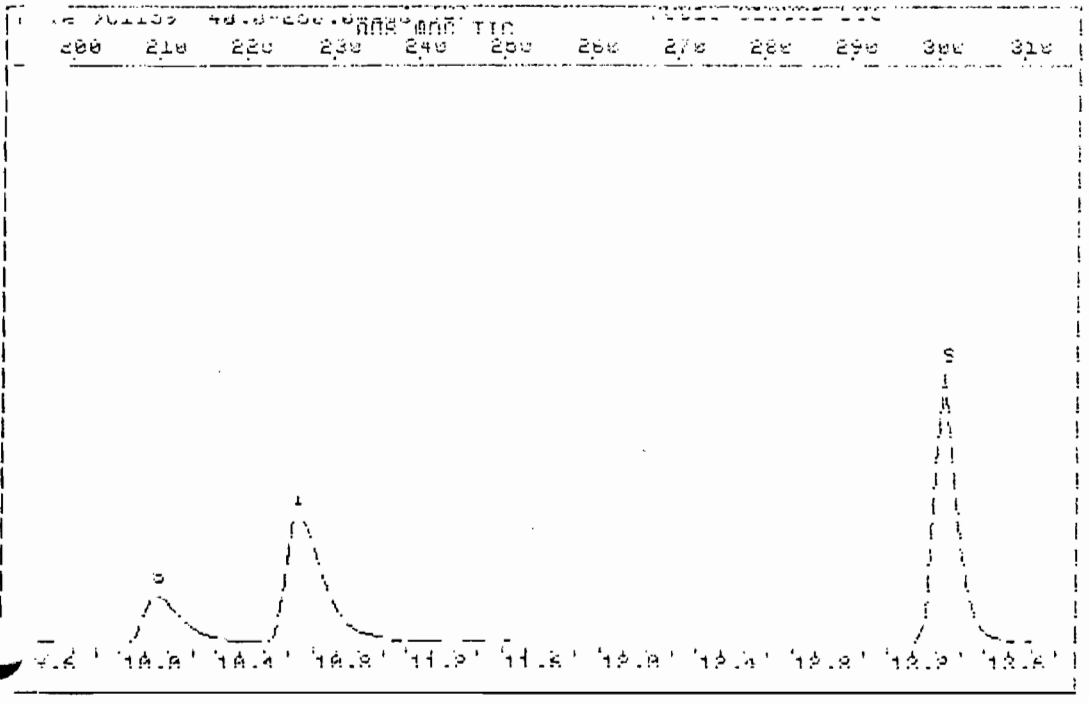
ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **0406 15:22

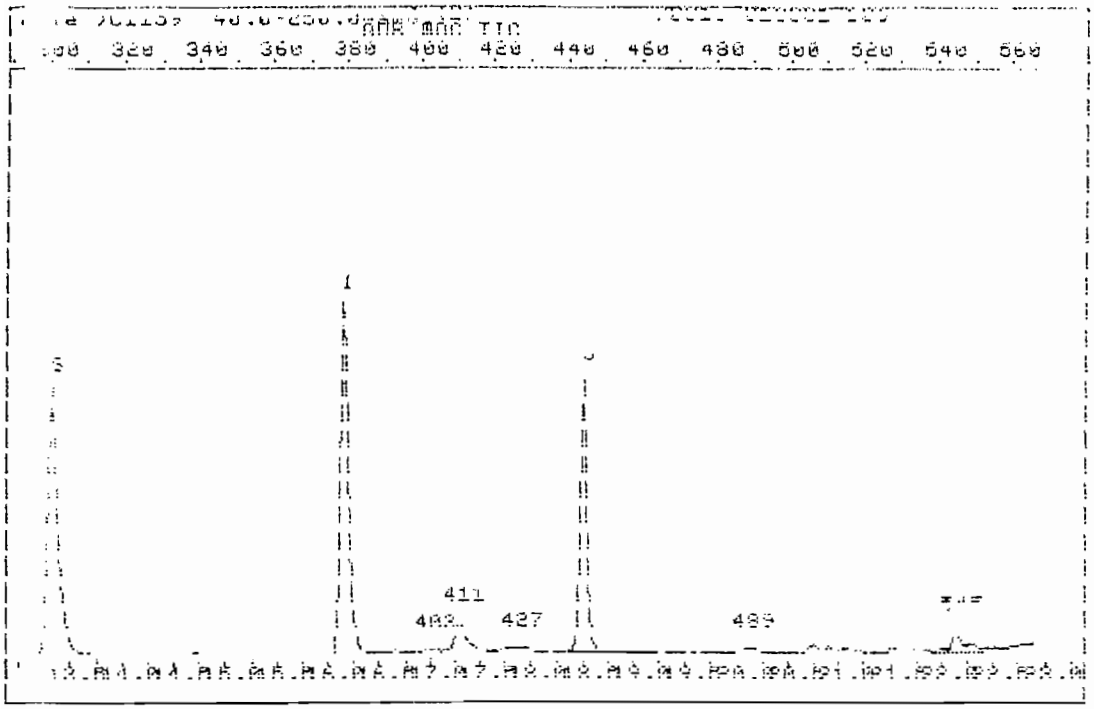
Compound	R.T.	Q ion	Area	Conc	Units	q
1) *Bromochloromethane	9.18	128.0	17109	50.00	ng	

* Compound is ISTD

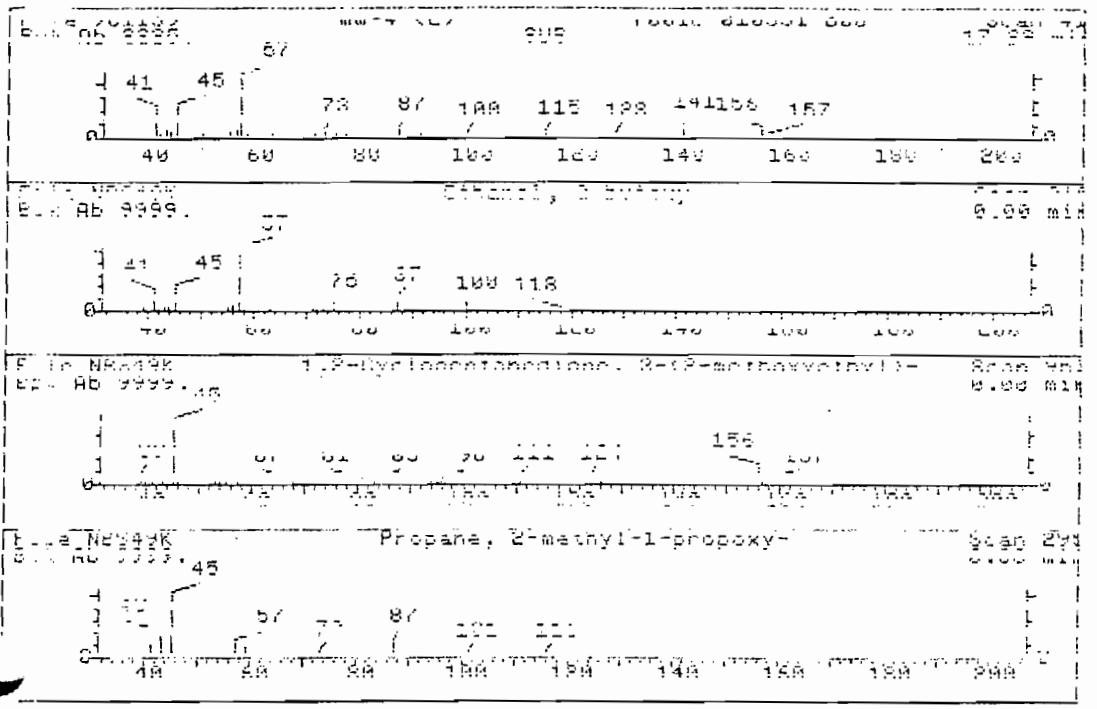
```
Os data file header from : 21:159::03

Sample: mw-4 (2)              Operator: MANAGER   SUPER GRP.    4/06/01 1?:.4
Misc  : 7001c 010331 b06
Sys. #:    1  MS model:  70  SW/HW rev.: LF  Aux #:  0     Equip ID: 7001  C
  Method file: METH03    Tuning file: MT9803   No. of extra records:  2
 Source temp.:   N/A  Analyzer temp.:  N/A     Transfer line temp. :   0

      Chromatographic temperatures :  45.   2?0.   2?0.     0.      0.
      Chromatographic times, min.  :  3.0   3?.0   3?.0    0.0     0.0
      Chromatographic rate, deg/min:  8.0     .1     0.0     .2     0.0


?1:159         mw-4 (2)             7001c 010331 b06
  40:01 250.0 CLP TIC
Upslope:  .2000 Area Reject:    21?00. Max Peaks:  6  Bunch: -1 Valley ?100 %
Unslope: 0.0000 Results File IC1159   Sorted by time/Area       INT

Peak    R.T.   first    max    last     peak      raw       corr.     corr.     % of
  #     min.   scan    scan    scan    height    area      area    % max.     total
---   ------  -----   -----   -----   ------   -------   -------  -------   -------
  1     3.27     14      22      68   12?760   421?872   4181?88   100.00    94.? *
  2    17.00    394     405     406     1487     5?487     29?66      .70      .
  3    17.29    406     411     420     9925    1??895     99?62*     2.38     2.?
  4    17.86    421     427     436     1885     25800     35?27*      .84      .79?
  5    20.10    483     489     500     1?16     29810     22?15      .5?      .5 *

  6    22.12    539     545     553     6?18    124745     61826     1.48     1.?96

                          Sum of corrected areas:     4429?84.

      Summary of Unknowns PBM Library Search and Quantitation

                                                 Retention      Unknown
      Standard   Concentration    Area            Time          Window
      --------   -------------  ---------      ---------    ----------------
         1            50.0      212000.          9.18       2.?1 -   9.90
         2            50.0      422222.         1?.62       9.90 -  1?.?8
         3            50.0      605832.         16.1?       13.38 -  22.88

   Dilution Factor =     1.00          This sample was 1000.00  g or m

 Correction Factor =     1.00

                          (Conc Int Std * Area Unknown)
Unknown Concentration =   |----------------------------| * Correction Factor
                          |        Area Int Std        |

                                                4:38 PM  MON., ?> APR., 2001
```







Instrument ID: 7111 Analyzed on: 4/10/11 13:24



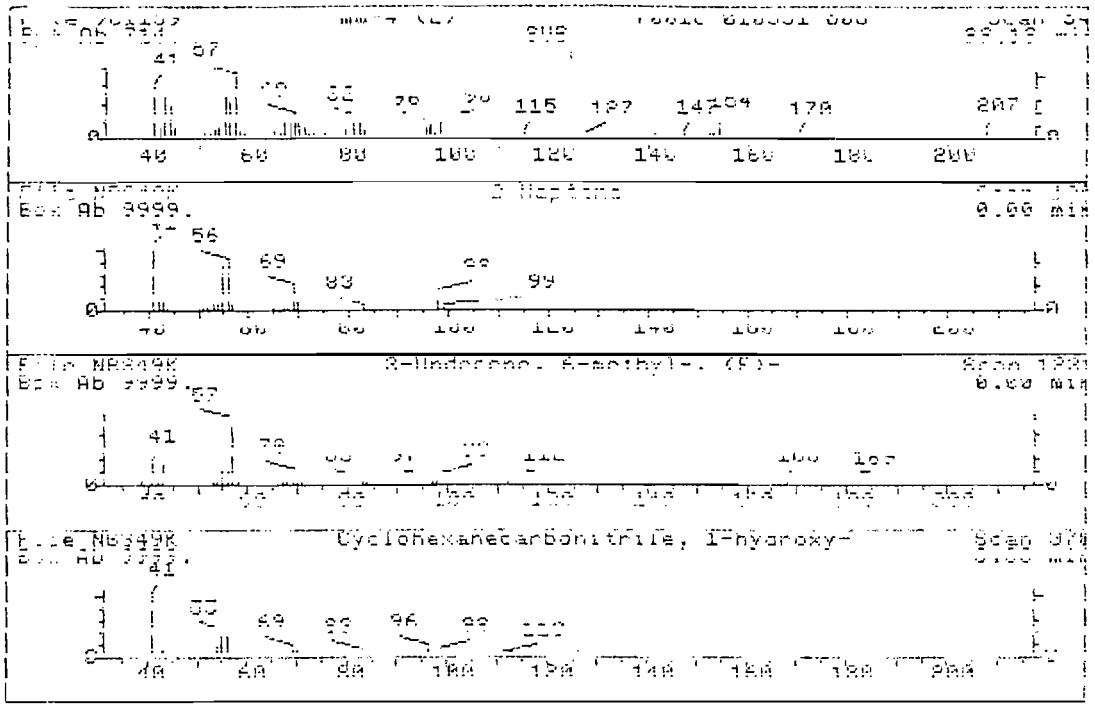
oxygenated

Instrument ID: 2111 Analyzed on: 4/18/11 13:24
Result 2 in PBM results file: 1C1199
Retention Time: 17.29 Area: 9958 Tentative Conc: 8.111
The unknown area is 16.48% of the nearest internal standard

1. Ethanol, 2-butoxy- 118 C6H14O2
2. 1,2-Cyclopentanedione, 3-(2-methoxyethyl)- 156 C8H12O3
3. Propane, 2-methyl-1-propoxy- 116 C7H16O
4. Propane, 1-chloro-1,2,2-trifluoro-3-(methoxymethoxy) 192 C5H8ClF3O2
5. Hexane, 3-methoxy- 116 C7H16O
6. Propanoic acid, 2-hydroxy- 90 C3H6O3

Sample file: >C1199 Spectrum #: 411
Search speed: 1 Tilting option: N No. of ion ranges searched: 12

	Prob.	CAS #	CON #	NAME	K	DK	#Fits	Tilt	%	CON	C	I	R	IO
1.	25	111762	2769	NBS49K	59	28	1	0	93	43	12			1.5
2.	25*	69687996	21480	NBS49K	35	36	1	0	48	48	7			1.9
3.	25*	15268492	7760	NBS49K	26	60	2	0	92	48	7			1.4
4.	18	26073329	3211	NBS49K	59	27	1	0	44	58	4			2.2
5.	15*	54658014	7964	NBS49K	38	47	2	0	50	56	3			1.9
6.	15	50215	35	NBS49K	27	53	0	0	57	58	3			1.4



Unknown

Instrument ID: 7000 Analyzed on: 4/10/01 13:24
Result 3 in PRM results file: 01159
Retention Time: 22.12 Area: 61826 Tentative Conc: 5.00
The unknown area is 10.21% of the nearest internal standard

1. 2-Heptene — 98 C7H14
2. 5-Undecene, 6-methyl-, (E)- — 168 C12H24
3. Cyclohexanecarbonitrile, 1-hydroxy- — 125 C7H11NO
4. Cycloheptane — 98 C7H14
5. 3-Heptene — 98 C7H14
6. 2-Decene, 5-methyl-, (Z)- — 154 C11H22

Sample file: >C1199 Spectrum #: 545
Search speed: 1 Tilting option: N No. of ion ranges searched: 21

	Prob.	CAS #	CON #	ROOT	K	DK	#Fit	Tilt	%	Con	C	I	R	IV
1.	31*	592778	1141	NBS49K	58	58	11	0	76	58	12			
2.	29	74630527	9550	NBS49K	47	45	2	0	197	48	7			
3.	25	931795	8968	NBS49K	58	49	2	0	153	48	7			17
4.	25*	291645	9447	NBS49K	35	67	2	0	44	511	7			14
5.	21*	592789	9449	NBS49K	56	55	0	11	23	58	5			18
6.	20*	74645866	9525	NBS49K	38	45	2	0	234	59	5			19

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-5(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-5(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1160
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	11.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	85.	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-5(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-5(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1160
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
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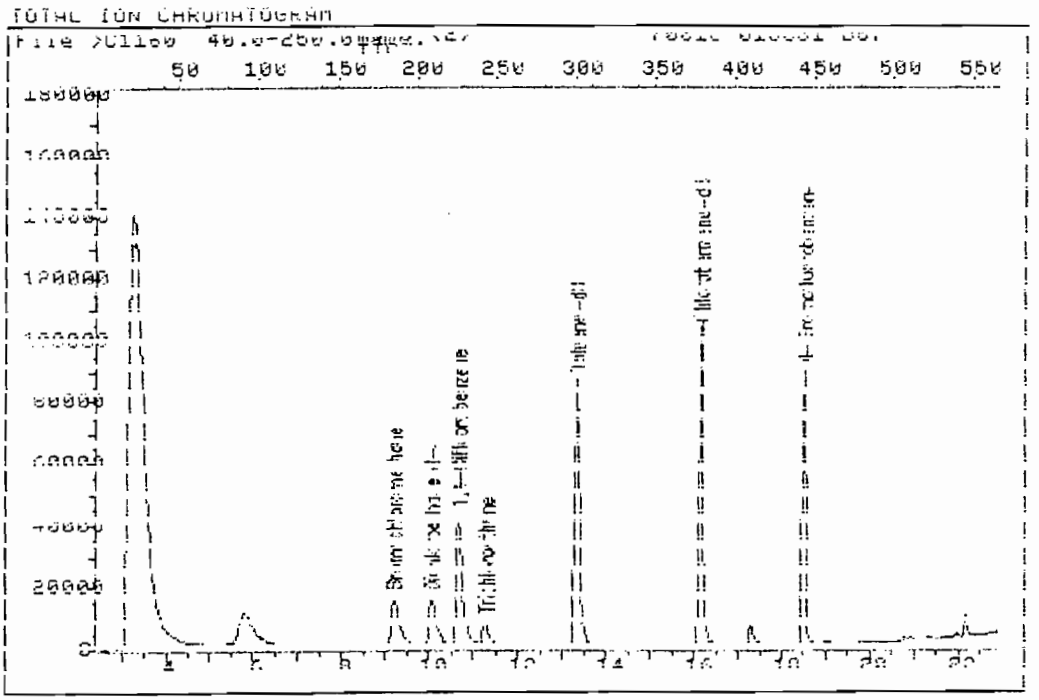
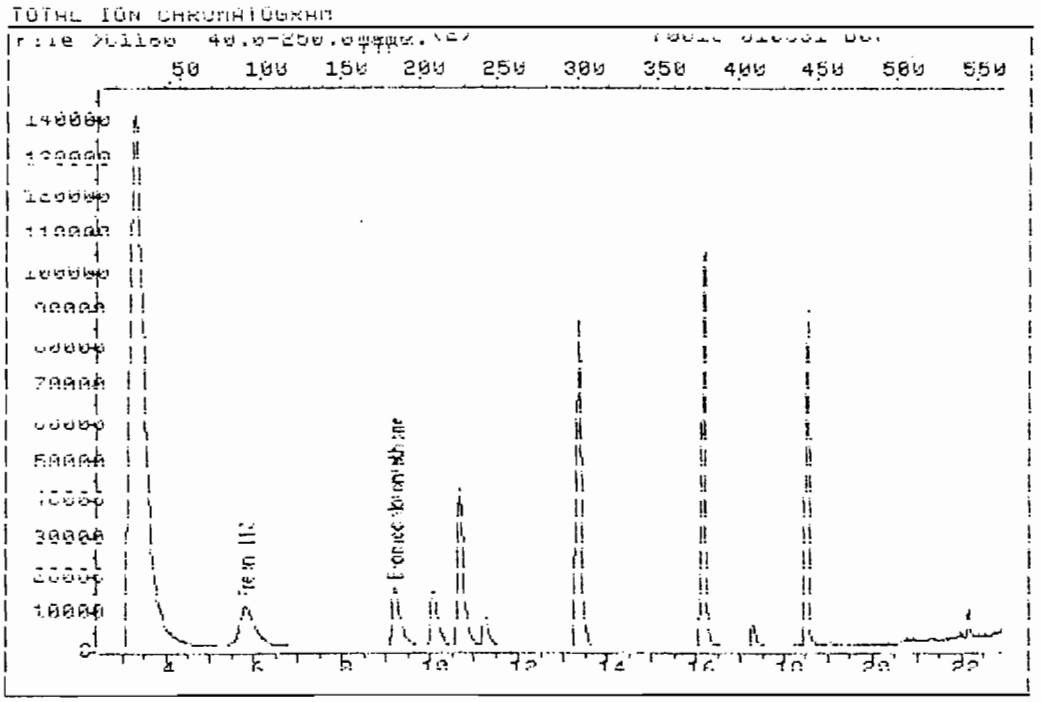
30.					



Data File: >C:\160::03 Quant Output File: ^C:\160::QT
Name: mw-5 (2) Instrument ID: >\01 L
Misc: 7001c 011551 b07

Id File: 1US91L::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:51 Last Qcal Time: **-406 0?:??

Operator ID: MANAGER
Quant Time : 010406 14:??
Injected at: **0406 13:54



Data File: >C1160::D3
Name: mw-5 (2)
Misc: 7001c 010331 b07

Quant Output File: 'C1160::QT
Instrument ID: >001

Id File: !DF11>::MT
Title: Freon 113 ID File
Last Calibration: :

Last Qcal Time: **0406 13:22

Operator ID: MANAGER
Quant Time : 010423 13:59
Injected at: **0406 13:54

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 010406 14:27
Output File: ^C1160::QT Injected at: **0406 13:54
Data File: >C1160::03 Dilution Factor: 1.00000
Name: mw-5 (2) Instrument ID: 7001 C
Misc: 7001c 010531 b07

ID File: ID591C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Qcal Time: **0406 09:53

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.18	128.0	36195	50.00	ug	97
19)	1,2-Dichloroethane-d4	10.04	65.0	70272	49.36	05	73
22)	*1,4-Difluorobenzene	10.66	114.0	128192	50.00	ug	99
29)	Trichloroethene	11.27	130.0	7921	11.36	05	84
36)	*Chlorobenzene-d5	16.14	117.0	146523	50.00	ug	94
42)	Toluene d-8	13.32	98.0	184691	50.95	05	98
48)	Bromofluorobenzene	18.51	95.0	87067	51.31	ug	84

* Compound is ISTD

QUANT REPORT Page 1

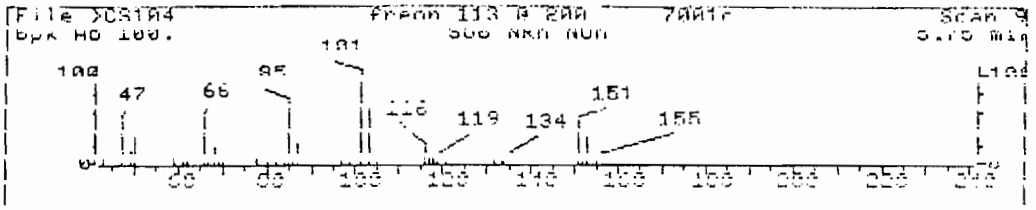
Operator ID: MANAGER Quant Rev: 7 Quant Time: 0[illegible]23 [illegible]:59
Output File: 'C1160::QT Injected at: **0406 13:54
Data File: >C1160::03 Dilution Factor: 1.000000
Name: mw-5 (2) Instrument ID: 2001 C
Misc: 2001c 010331 b07

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **0406 15:22

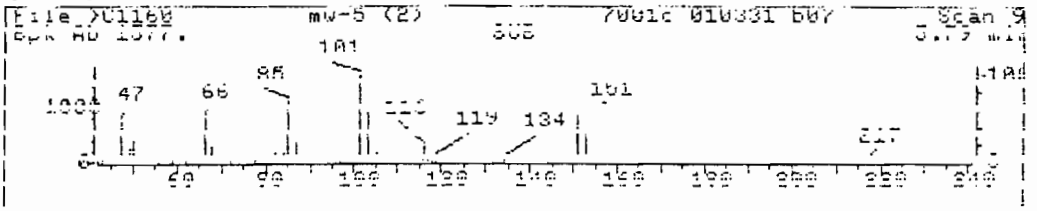
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.18	128.0	16195	50.00	ng	97
2)	Freon 113	5.29	101.0	39696	84.62	ng	96

* Compound is ISTD

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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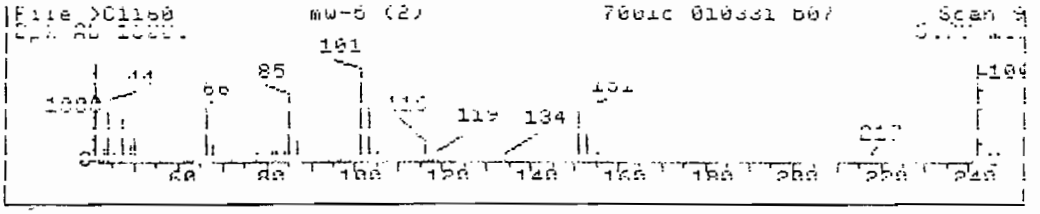


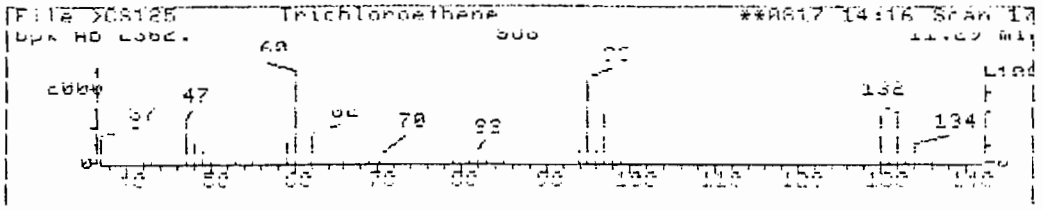
Data File: >C1160::03
Name: mw-5 (2)
Misc: 7001c 010331 b07
Quant Time: 010423 13:59
Injected at: **0406 13:54
Last Qcal Time: **0406 15:22

Quant Output File: 'C1160::QT
Instrument ID: >H01 1.

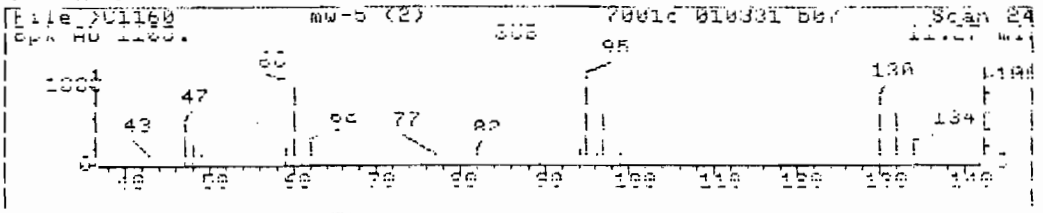
Quant ID File: UF113::QI
Last Calibration: :

Compound No : 2
Compound Name : Freon 113
Scan Number : 92
Retention Time: 5.79 min.
Quant Ion : 101.0
Area : 396[illegible]
Concentration : 84.62 UG
q-value : 95

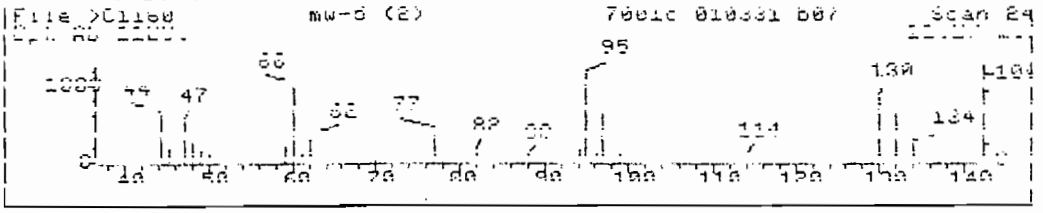
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >C1160::03
Name: mw-5 (2)
Misc: 7001c 010331 b07
Quant Time: 010406 14:17
Injected at: **0406 13:54
Last Qcal Time: **0406 09:53

Quant Output File: >C1160::QT
Instrument ID: >H01
Quant ID File: 1>A91C::QT
Last Calibration: 0010810 08:51

Compound No : 29
Compound Name : Trichloroethene
Scan Number : 244
Retention Time: 11.27 min.
Quant Ion : 130.0
Area : 7971
Concentration : 11.36 UG
q-value : 84

MS data file header from : >1.1160::03

Sample: mw-5 (2) Operator: MANAGER SUPER GRP. 4/0/ 01]:: 4
Misc : 70016 010331 b0/
Sys. #: 1 MS model: 70 Sw/Hw rev.: LP A/S # : 0 Equip ID: 7001 C
Method file: METH03 Tuning file: MT7003 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	270.	270.	0.	0.
Chromatographic times, min. :	3.0	35.0	35.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0

>1.1160 mw-5 (2) 70016 010331 b0/
40.01 250.0 LP 1C
Upslope: .2000 Area Reject: 22255. Max Peaks: 4 Bunch: -1 Valley 100 %
Unslope: 0.0000 Results File 1C1160 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	3.27	12	22	61	140579	3492515	3456065	100.00	90.64
2	5.29	79	92	114	10353	357019	259464	7.51	6.822
3	17.29	405	413	420	7152	85094	52600	1.52	1.41
4	22.16	543	546	550	7023	88215	34432	1.00	.905

Sum of corrected areas: 3801261.

Summary of Unknowns PBM Library Search and Quantitation

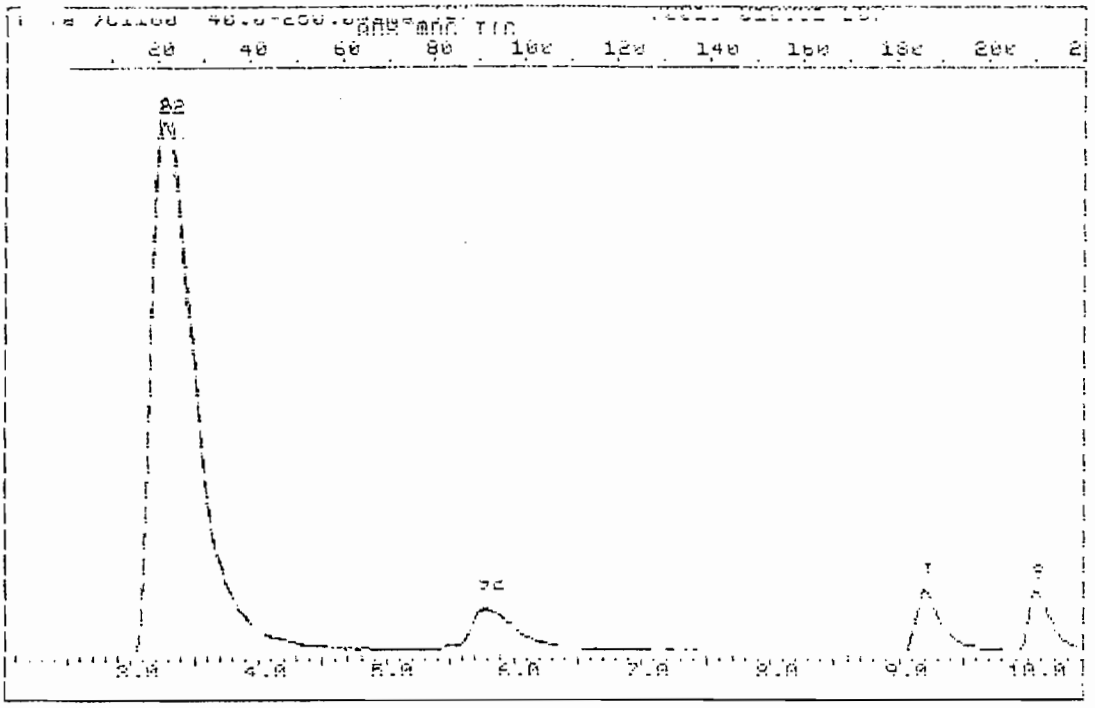
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	223250.	9.18	7.51 - 9.92
2	50.0	43546/.	10.66	9.92 - 13.41
3	50.0	628302.	16.14	13.41 - 22.16

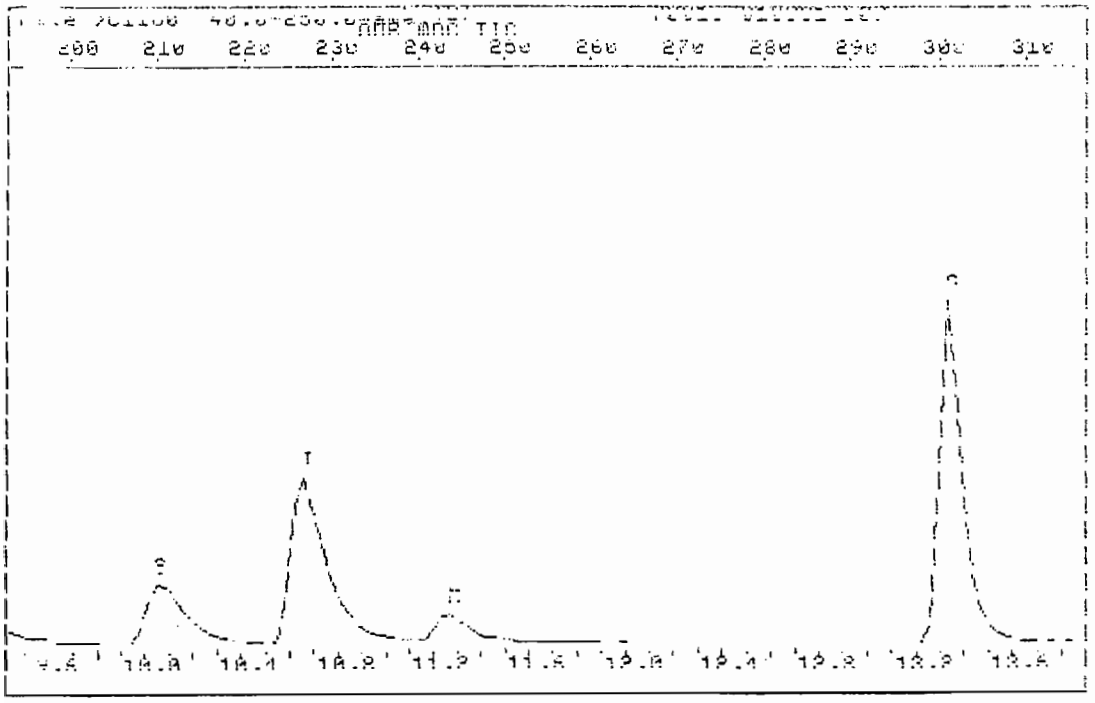
Dilution Factor = 1.00 This sample was 10000.00 g or mL

Correction Factor = 1.00

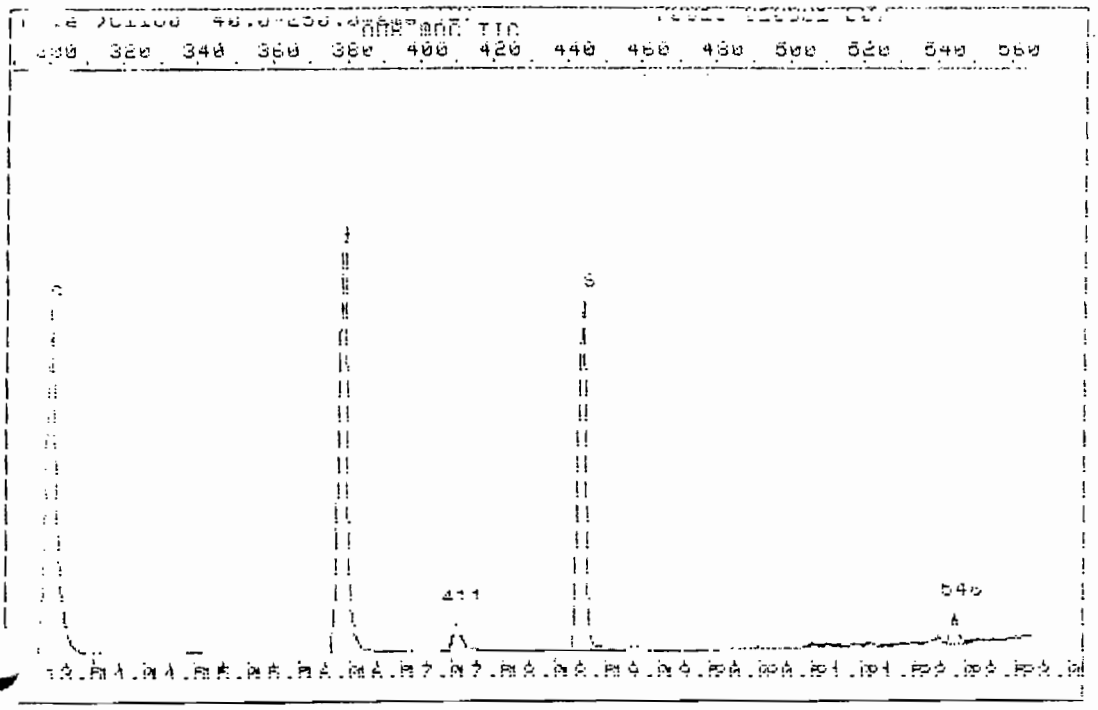
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

4:55 PM MON., 23 APR., 2001





Instrument ID: 7001 Analyzed on: 4/16/01 13:54



Instrument ID: 7011 Analyzed on: 4/18/01 0:54

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-6(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-6(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1168
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	3.	J
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	4.	J
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	23.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	110.	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-6(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-6(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1168
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
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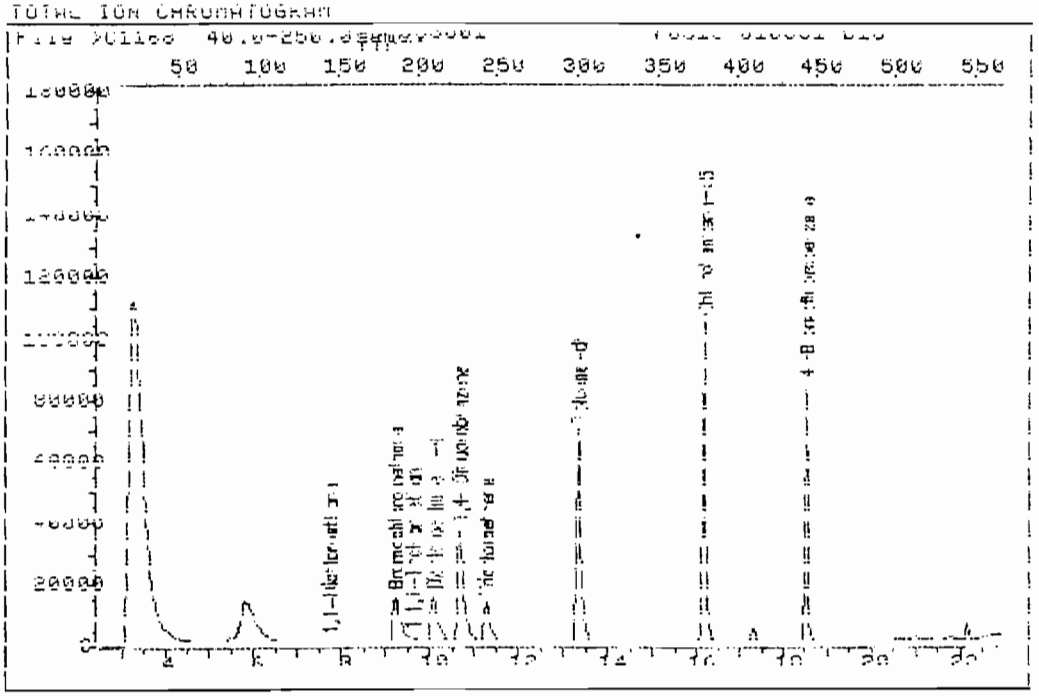
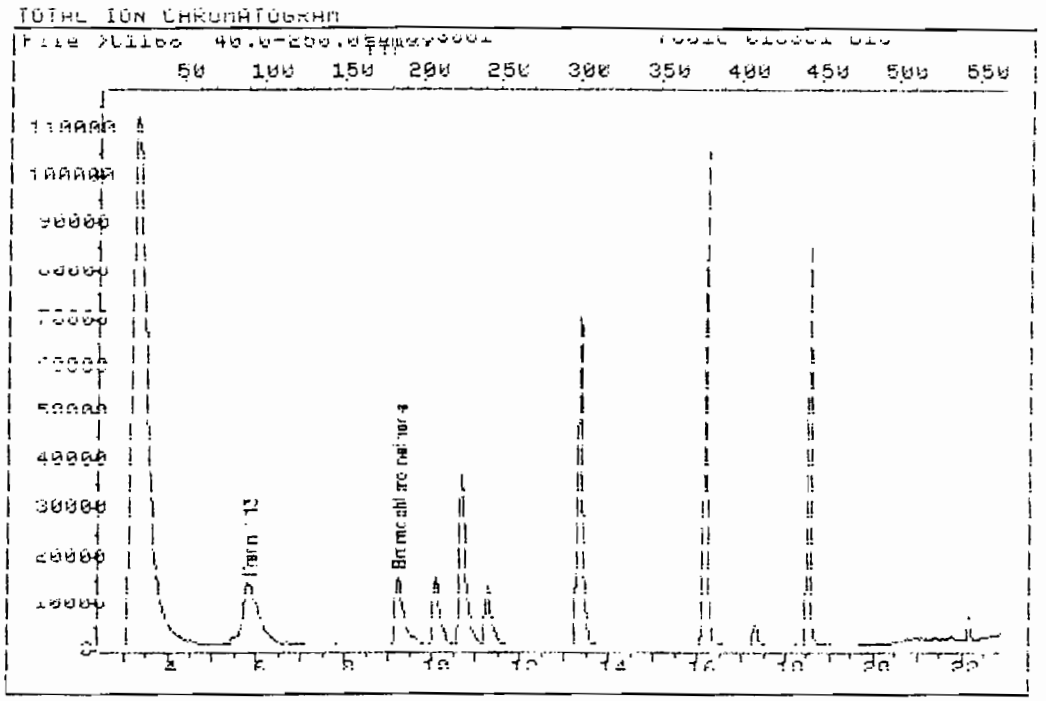
TOTAL ION CHROMATOGRAM



Data File: >C1168::03 Quant Output File: ^C1168::QT
Name: ~~eb 033001~~ mw-6(2)
Misc: 700ic 010331 b~~2~~8

Id File: TDS91[illegible]::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Qcal Time: **[illegible]6 07:[illegible]

Operator ID: MANAGER
Quant Time : 010406 18:[illegible]
Injected at: **0406 17:49



Data File: >C1168::05 Quant Output File: 'C1168::QT
Name: ~~eb 033101~~ mw-6(2)
Misc: 7001c 010331 b~~5~~8 Instrument ID: 7a01 L

Id File: DF11>::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **0406 15:47

Operator ID: MANAGER
Quant Time : 010423 14:11
Injected at: **0406 17:49

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 010486 1H:??
Output File: ^C1168::QT Injected at: **0406 17:49
Data File: >C1168::D3 Dilution Factor: 1.000000
Name: ~~eb 033001~~ mw-6 (2) Instrument ID: 7001 C
Misc: 7001c 010331 ~~B15~~ B8

ID File: IDS91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:51 Last Qcal Time: **0406 09:53

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	*Bromochloromethane	9.21	128.0	35813	50.00	ug	??
14)	1,1-Dichloroethane	7.24	63.0	2707	3.19	UG	92
19)	1,2-Dichloroethane-d4	10.08	65.0	65997	42.14	ug	??
22)	*1,4-Difluorobenzene	10.66	114.0	111530	50.00	UG	95
23)	1,1,1-Trichloroethane	9.61	97.0	4680	4.28	ug	??
29)	Trichloroethene	11.27	130.0	14000	22.97	UG	??
36)	*Chlorobenzene-d5	16.17	117.0	123650	50.00	ug	??
47)	Toluene d-8	13.32	98.0	129650	51.91	UG	??
48)	Bromofluorobenzene	18.51	95.0	69064	48.27	ug	??

* Compound is ISTD

QUANT REPORT Page 1

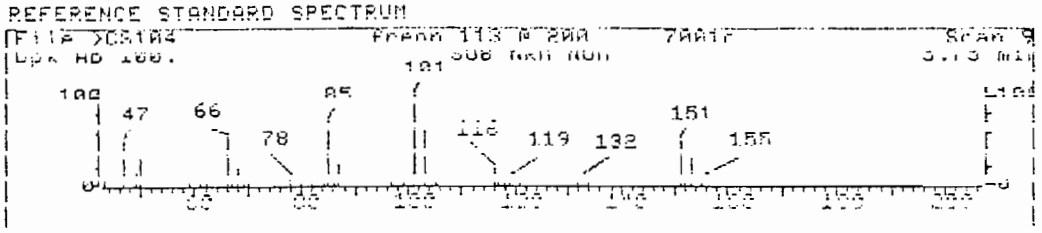
Operator ID: MANAGER Quant Rev: 7 Quant Time: 010493 14:11
Output File: 'C1168::QT Injected at: **0406 17:49
Data File: >C1168::D3 Dilution Factor: 1.0000
Name: ~~eb 033001~~ mw-6(2) Instrument ID: 7001 C
Misc: 7001c 010331 ~~B15~~ B8

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **0406 15:22

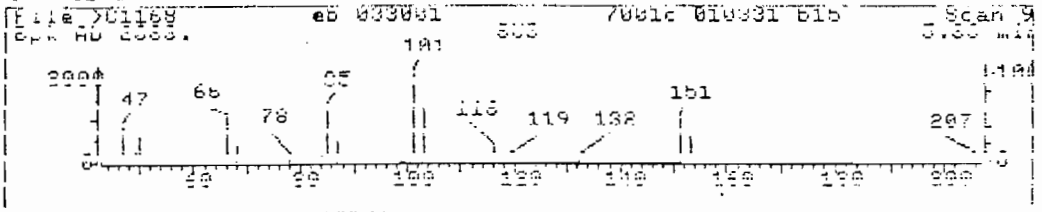
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.21	128.0	15811	50.000	UG	97
2)	Freon 113	5.83	101.0	49519	108.23	UG	94

* Compound is ISTD

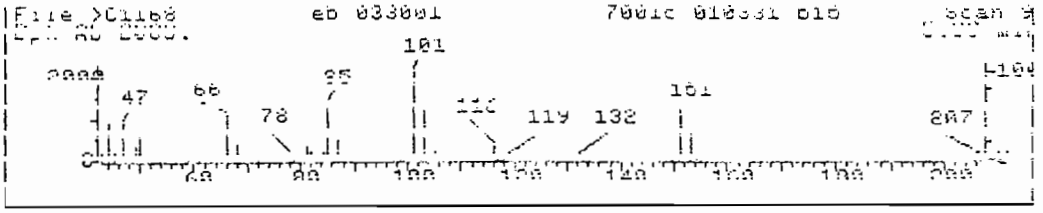
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

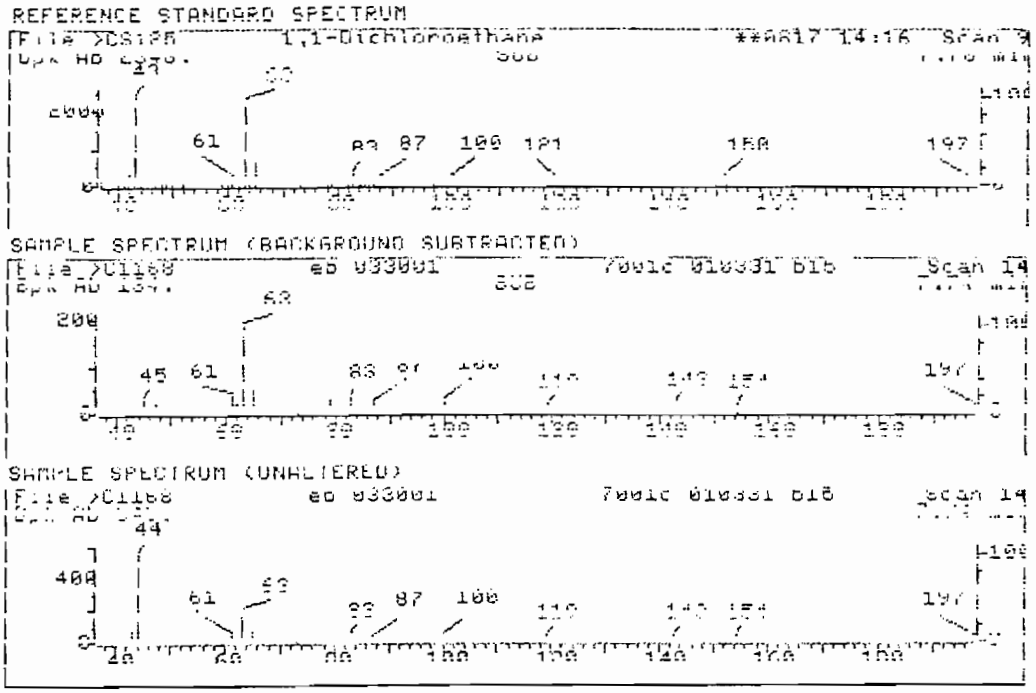


Data File: >C1168::D3
Name: eb 033001
Misc: 7001c 010331 b15
Quant Time: 010423 14:01
Injected at: **0406 17:49
Last Qcal Time: **0406 15:22

Quant Output File: 'C1168::QT
Instrument ID: [illegible]

Quant ID File: [illegible]
Last Calibration: :

Compound No : 2
Compound Name : Freon [illegible]
Scan Number : 93
Retention Time: 5.83 min.
Quant Ion : 101.0
Area : 495.[illegible]
Concentration : 108.23 UG
q-value : 94

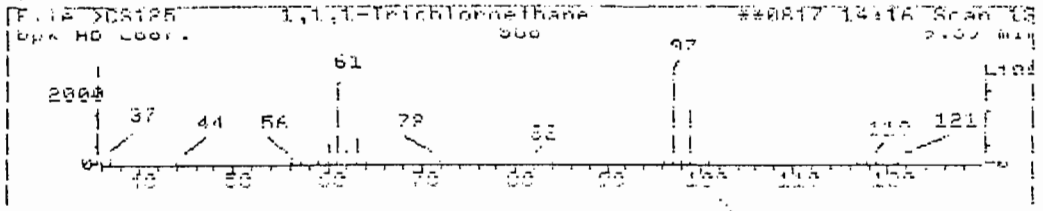


Data File: >C1168::03
Name: eb 033001
Misc: 7001c 010331 b15
Quant Time: 010406 18:13
Injected at: **0406 17:49
Last Qcal Time: **0406 09:53

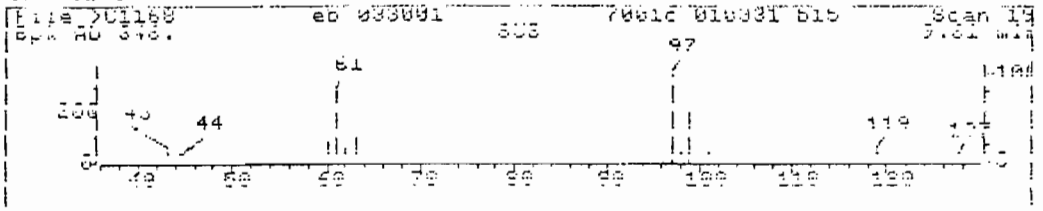
Quant Output File: ^C1168::QT
Instriment ID: >001 L
Quant ID File: I:>91C::.T
Last Calibration: 000810 08:51

Compound No : 14
Compound Name : 1,1-Dichloroethane
Scan Number : 146
Retention Time: 7.24 min.
Quant Ion : 63.0
Area : 27[illegible]
Concentration : 3.19 UG
q-value : 97

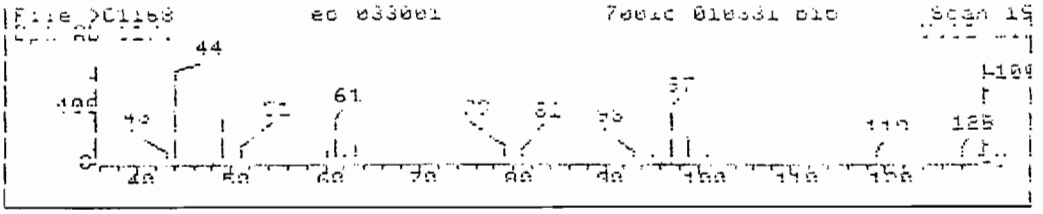
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



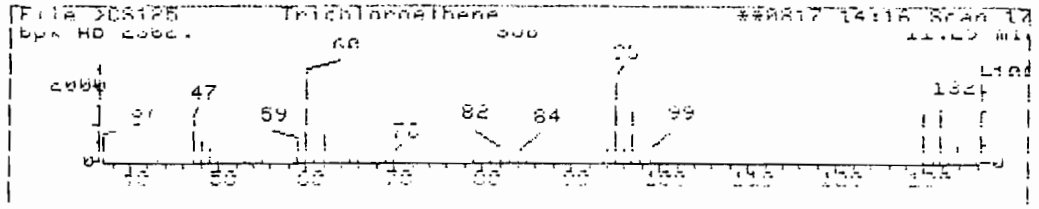
SAMPLE SPECTRUM (UNFILTERED)



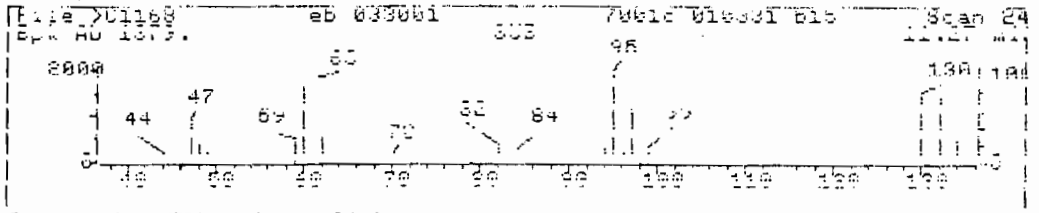
Data File: >C1168::03 Quant Output File: >C1168::QT
Name: eb 033001 Instrument ID: 7001 L
Misc: 7001c 010331 b15
Quant Time: 010406 18:13 Quant ID File: DISK910::MT
Injected at: **0406 17:49 Last Calibration: 01APR10 08:51
Last Qcal Time: **0406 09:53

Compound No : 23
Compound Name : 1,1,1-Trichloroethane
Scan Number : 198
Retention Time: 9.61 min.
Quant Ion : 97.0
Area : 46111
Concentration : 4.28 UG
q-value : 86

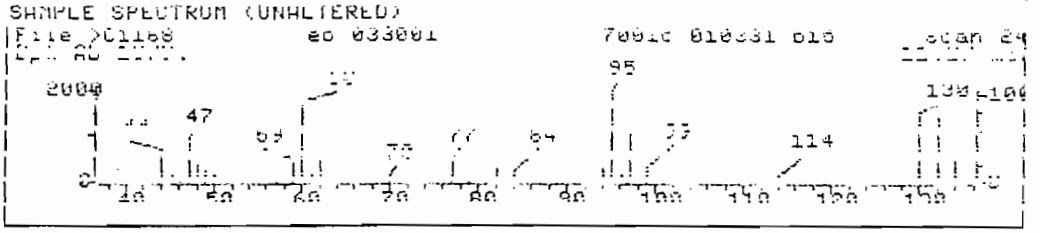
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

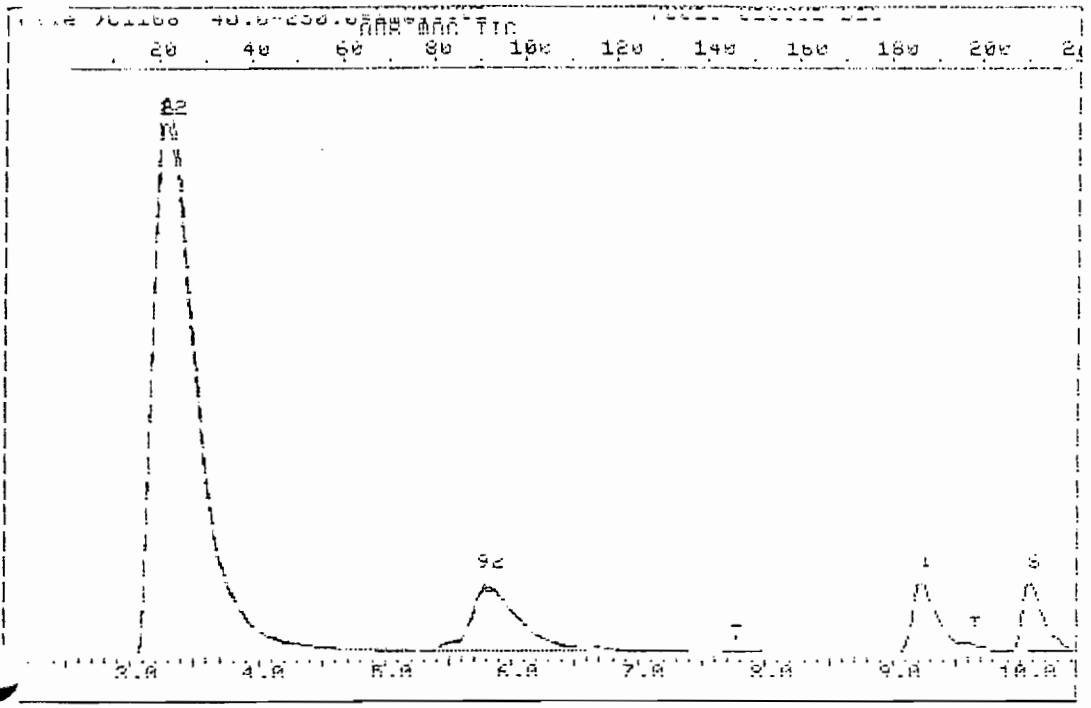


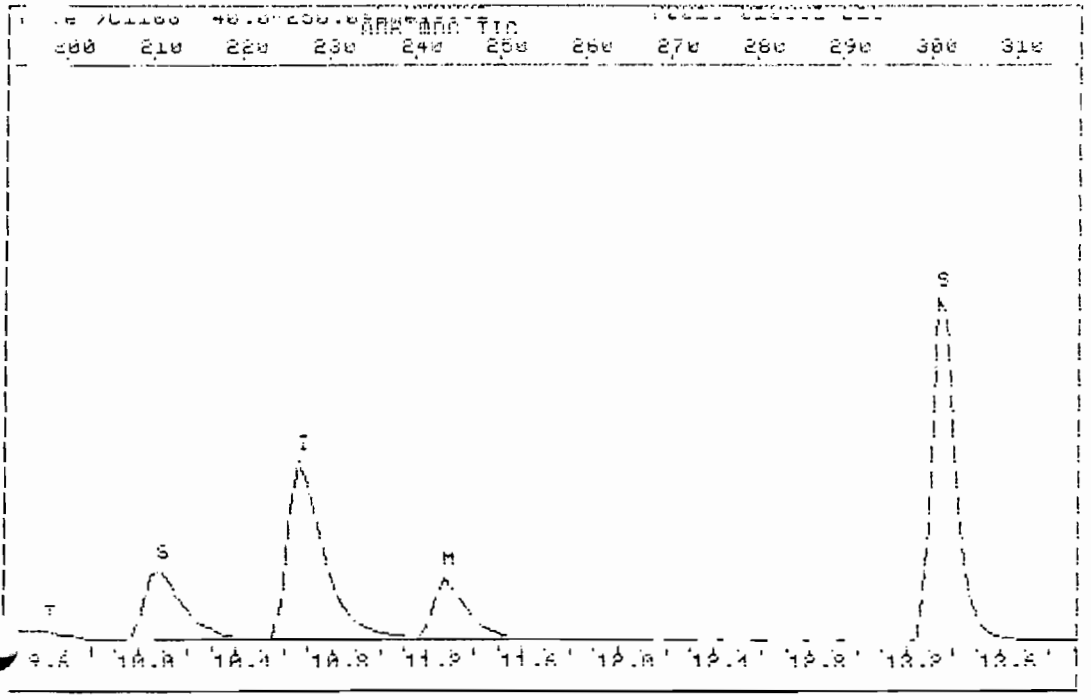
Data File: >C1168::03
Name: eb 033001
Misc: 7001c 010331 b15
Quant Time: 010406 18:13
Injected at: **0406 17:49
Last Qcal Time: **0406 09:53

Quant Output File: >C1168::QT
Instrument ID: >301 L
Quant ID File: [illegible]
Last Calibration: 010410 08:51

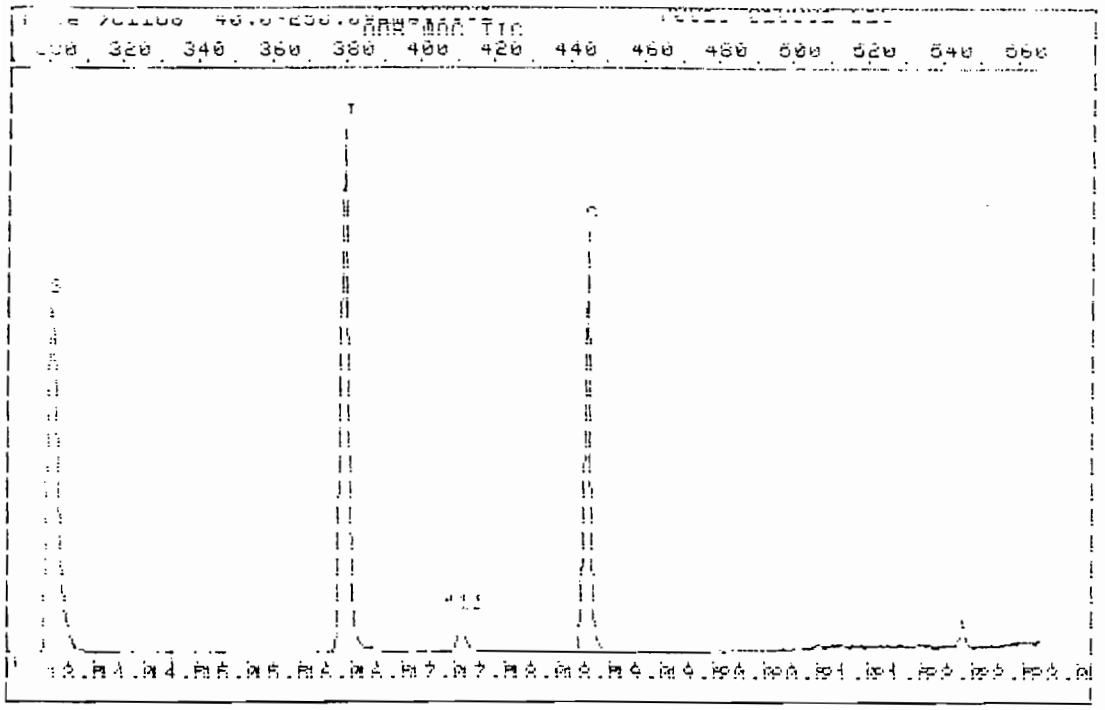
Compound No : 29
Compound Name : Trichloroethene
Scan Number : 244
Retention Time: 11.27 min.
Quant Ion : 130.0
Area : 140[illegible]
Concentration : 22.97 UG
q-value : 94

```
Ms data file header from : >C:168::03

Sample: ~~eb 033001~~ mw-62)   Operator: MANAGER   SUPER GRP.   4/18/91 17:5?
Misc  : 7001c 010331 ~~b15~~ B8
Sys. #:    1  MS model:  70  SW/HW rev.: LF  ALS # :  0    Equip ID: 7001  C
  Method file: METH03    Tuning file: M19003   No. of extra records:  2
 Source temp.:   N/A  Analyzer temp.:  N/A     Transfer line temp. :   0

      Chromatographic temperatures :  45.   >>0.   >>0.     0.      0.
      Chromatographic times, min.  :  3.0   33.0   33.0    0.0     0.0
      Chromatographic rate, deg/min:  8.0     .1     0.0     .>      0.0


>C:168          eb 033001            7001c 010331 b15
  40.01 250.0 CAP FID
Upslope:  .2000 Area Reject:    19>00. Max Peaks:  3  Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File :C:168   Sorted by: Time/Area        INT

Peak    R.T.   first    max     last     peak      raw       corr.     corr.     % of
  #     min.   scan     scan    scan     height    area      area    % max.     total
---   ------  -----   -----   -----   -------  --------  --------  --------  --------
  1     3.27      14      22      21     11007   2>80>45   >>44807    100.00     87.
  2     5.79      80      92     114     13099    429842    340955     12.42     10.
  3    17.29     407     411     421      4607     6>>92     >6>46      1.35      1.

                          Sum of corrected areas:     3122>1.

        Summary of Unknowns PBM Library Search and Quantitation

                                                 Retention       Unknown
        Standard   Concentration     Area          Time          Window
        --------   -------------  ---------   ---------    ------------------
           1            50.0       199802.       9.21      >.>1 -    9.94
           2            50.0       375844.      10.66      9.94 -   13.41
           3            50.0       >>6218.      16.17     13.41 -   2>.>8

   Dilution Factor =     1.00          This sample was 10000.00  g or mL

 Correction Factor =     1.00

                          |Conc Int Std * Area Unknown|
Unknown Concentration = |--------------------------| * Correction Factor
                          |       Area Int Std       |

                                                6:43 PM  MON., 23  APR., 2001
```





Instrument ID: 7011 Analyzed on: 4/06/11 17:49



Instrument ID: 7000 Analyzed on: 4/18/11 17:49

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-7(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-7(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1162
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	2.	J
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	4.	J

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

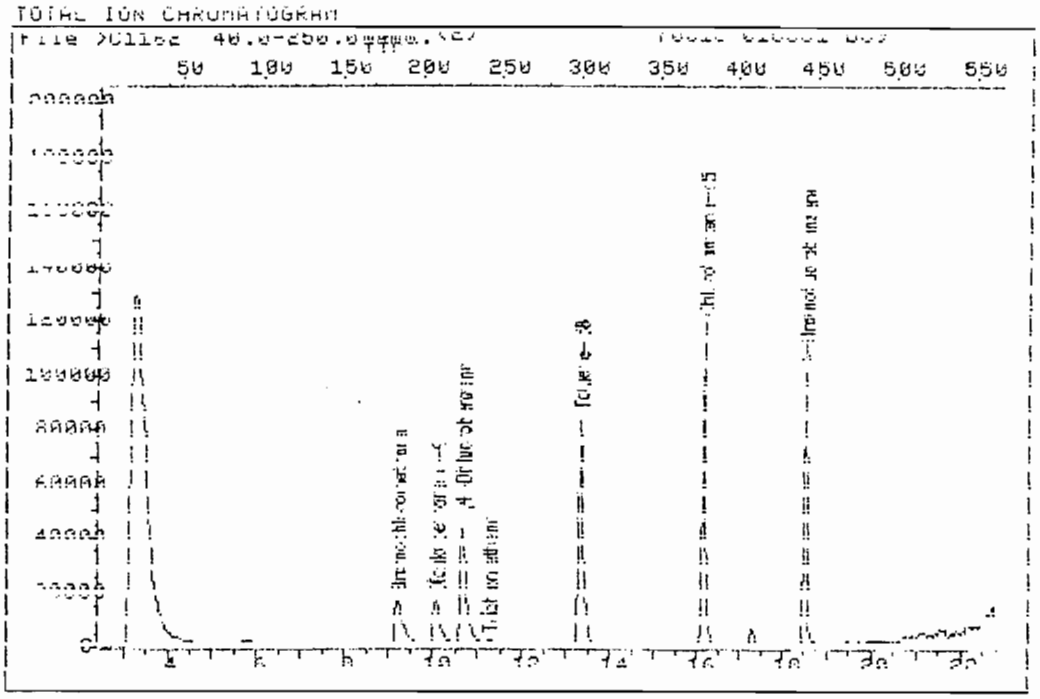
MW-7(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-7(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1162
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	22.70	7.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					



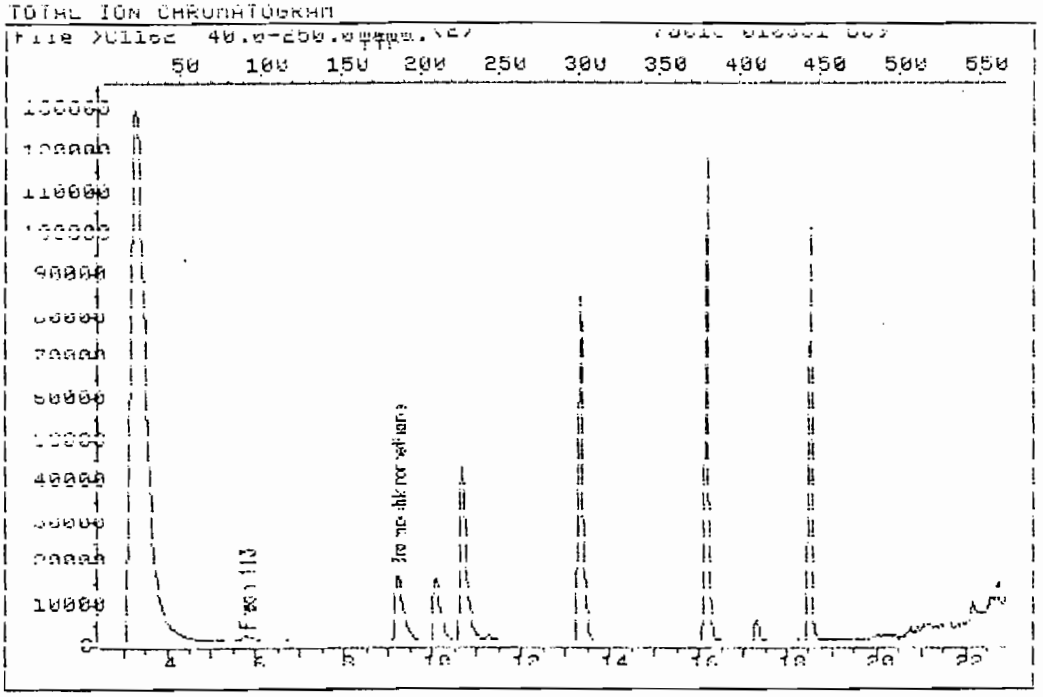
Data File: >C1162::03
Name: mw-7 (2)
Misc: 7001c 010331 b09

Quant Output File: >C1162::QT
Instrument ID: >001

Id File: IDS91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:31

Operator ID: MANAGER
Quant Time : 010406 15:
Injected at: **0406 14:52

TOTAL ION CHROMATOGRAM



Data File: >C1162::D3
Name: mw-7 (2)
Misc: 7001c 010331 b09

Quant Output File: 'C1162::QT
Instrument ID: 7001 C

Id File: 10F113::MT
Title: Freon 113 ID File
Last Calibration: :

Last Qcal Time: **0406 15:22

Operator ID: MANAGER
Quant Time : 010423 14:00
Injected at: **0406 14:52

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 010406 14:16
Output File: ^C1162::QT Injected at: **0406 14:52
Data File: >C1162::03 Dilution Factor: 1.000000
Name: mw-7 (2) Instrument ID: 7001 C
Misc: 7001c 010331 b09

ID File: IDS91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Qcal Time: **0406 09:53

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.21	128.0	18061	50.00	ug	99
19)	1,2-Dichloroethane-d4	10.08	65.0	72956	49.25	105	72
22)	*1,4-Difluorobenzene	10.65	114.0	128981	50.00	ug	99
29)	Trichloroethene	11.27	130.0	1105	1.57	105	85
36)	*Chlorobenzene-d5	16.17	117.0	144430	50.00	ug	94
42)	Toluene d-8	13.32	98.0	184290	51.57	105	92
48)	Bromofluorobenzene	18.51	95.0	83297	49.80	ug	94

* Compound is ISTD

QUANT REPORT Page 1

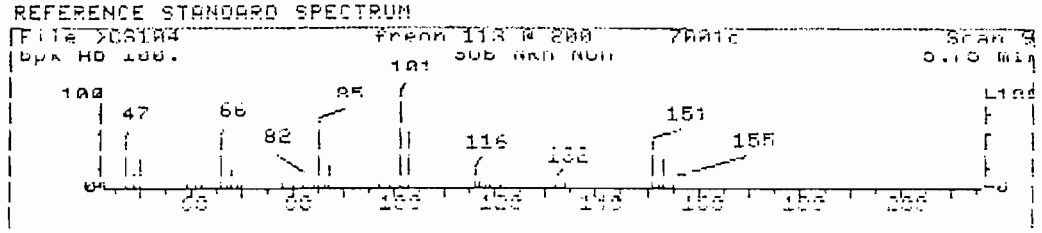
Operator ID: MANAGER Quant Rev: 7 Quant Time: 010423 14:00
Output File: 'C1162::QT Injected at: **0406 14:52
Data File: >C1162::D3 Dilution Factor: 1.000000
Name: mw-7 (2) Instrument ID: 7001 C
Misc: 7001c 010331 b09

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qual Time: **0406 15:22

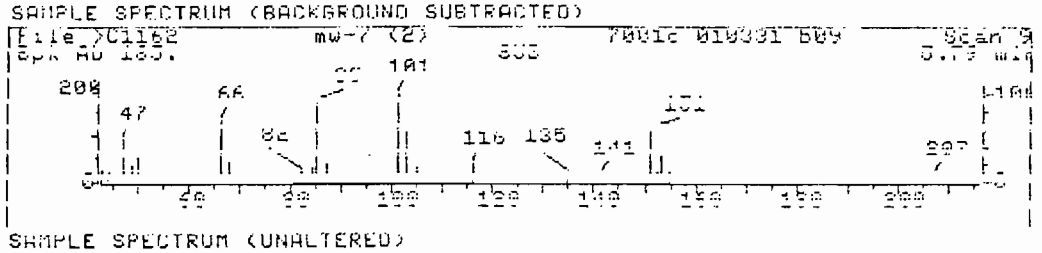
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.21	128.0	17900	50.00	UG	74
2)	Freon 113	5.29	101.0	1917	3.20	UG	80

* Compound is ISTD

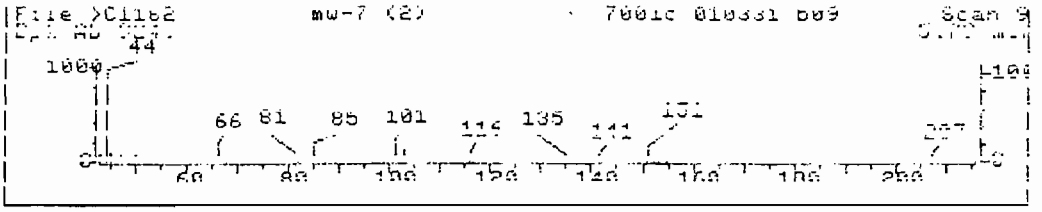
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

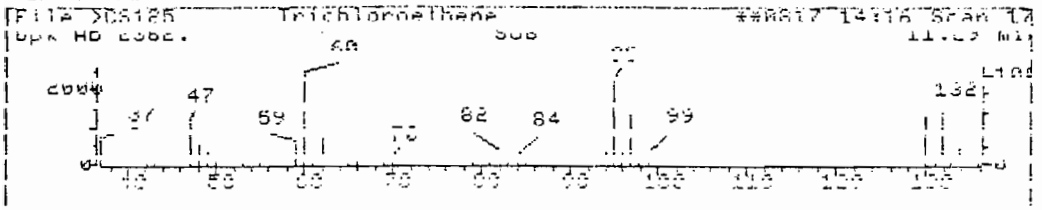


Data File: >C1162::03
Name: mw-7 (2)
Misc: 7001c 010331 b09
Quant Time: 010423 14:00
Injected at: **0406 14:52
Last Qcal Time: **0406 15:22

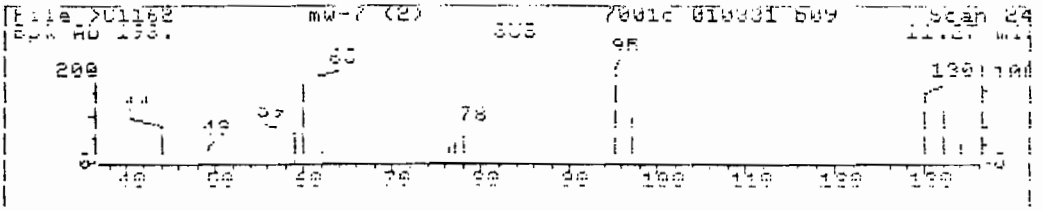
Quant Ourput File: 'C1162::QT
Instrument ID: >001
Quant ID File: DF113::DT
Last Calibration: :

Compound No : 2
Compound Name : Freon 113
Scan Number : 92
Retention Time: 5.79 min.
Quant Ion : 101.0
Area : 19.2
Concentration : 3.70 UG
q-value : 80

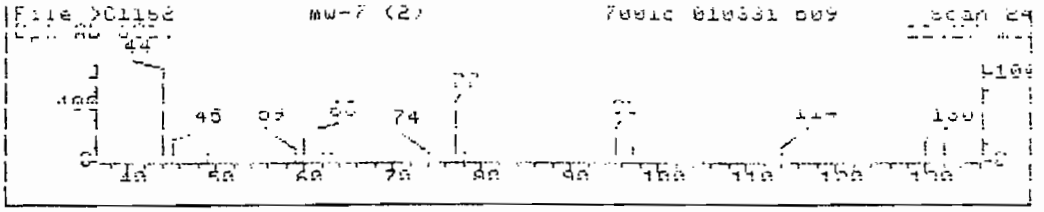
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNFILTERED)



Data File: >C1162::05 Quant Output File: >C1162::QT
Name: mw-7 (2) Instrument ID: >001 L
Misc: 7001c 010331 b09
Quant Time: 010406 15:16 Quant ID File: [illegible]
Injected at: **0406 14:52 Last Calibration: 000410 08:51
Last Qcal Time: **0406 09:53

Compound No : 29
Compound Name : Trichloroethene
Scan Number : 244
Retention Time: 11.27 min.
Quant Ion : 130.0
Area : [illegible]
Concentration : 1.52 UG
q-value : 83

MS data file header from : >C:162::03

Sample: mw-7 (2) Operator: MANAGER SUPER GRP. ' 4/0A.01 14:?/
Misc : 7001c 010331 b09
Sys. #: 1 MS model: 70 Sw/Hw rev.: LF Alt # : 0 Equip ID: 7001 C
Method file: METH03 Tuning file: MT9H03 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures : 45. 2>H. 2>0. 0. 0.
Chromatographic times, min. : 3.0 3>.0 3>.0 0.0 0.0
Chromatographic rate, deg/min: 8.0 .1 0.0 .2 0.0

>C:162 mw-7 (2) 7001c 010>31 b09
40.01 250.0 CLP 1IC
Upslope: .2000 Area Reject: 2>>00. Max Peaks: 7 Bunch: -1 Valley >100 %
Unslope: 0.0000 Results File IC:in2 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	3.27	15	22	66	329003	3205920	>16>910	100.00	92.6.3
2	5.75	87	91	110	14>11	81929	30969	.9>	.895
3	17.29	408	411	423	6006	26498	44>>4	1.46	1.2.3
4	21.11	513	517	522	2398	9>459	29000	.92	.849
5	21.65	527	532	554	2964	91476	2>>25*	.8.	.8 >
6	22.16	542	546	548	5199	98076	3>965	1.04	.965
7	22.20	553	561	563	>849	241082	88>45	2.79	2.5.>

Sum of corrected areas: 341644R.

Summary of Unknowns PRM Library Search and Quantitation

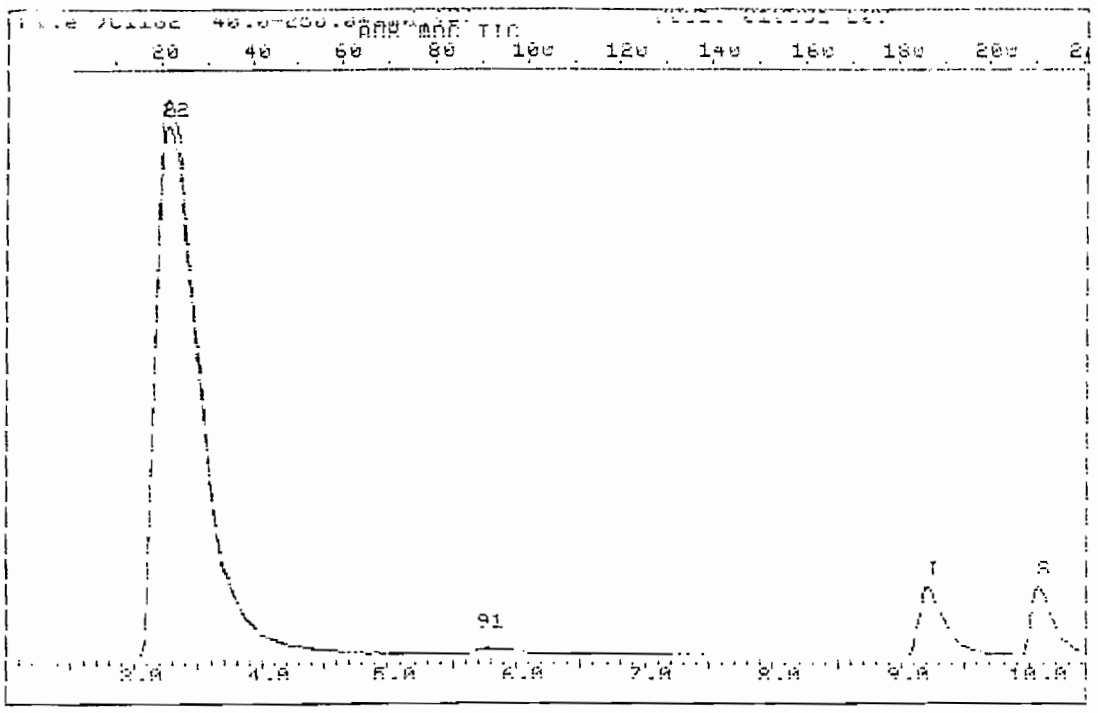
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	232005.	9.21	2.51 - 9.9>
2	50.0	441264.	10.65	9.93 - 1>.41
3	50.0	629873.	16.17	1>.41 - 2>.0R

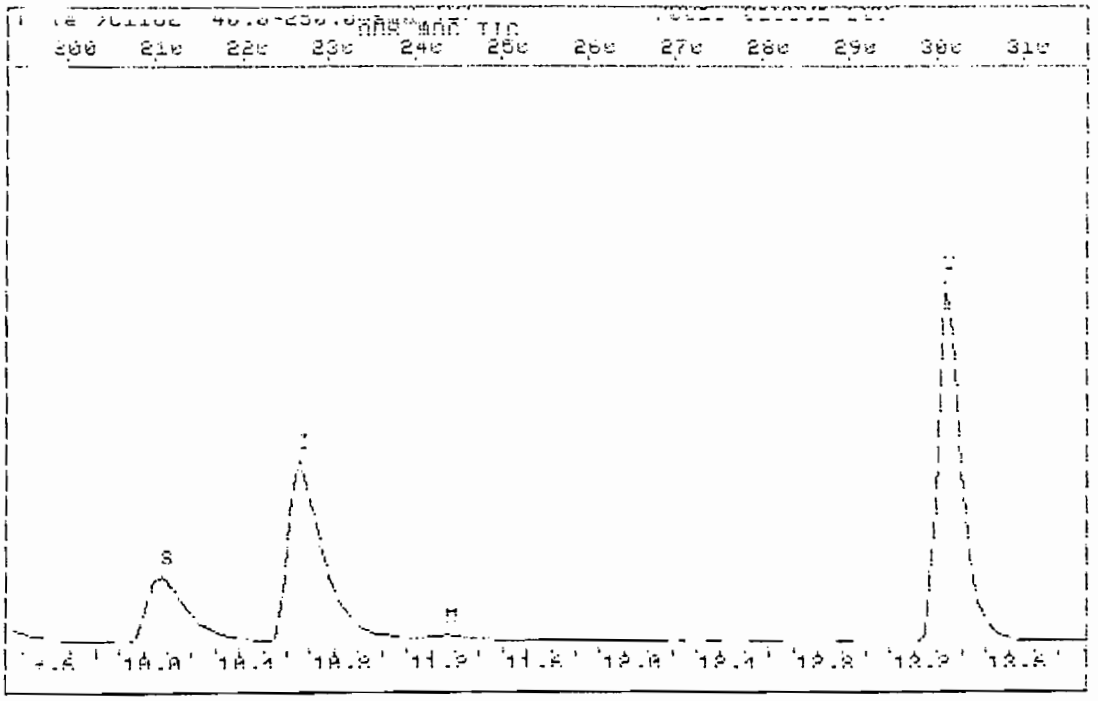
Dilution Factor = 1.00 This sample was 1000.00 g or ml.

Correction Factor = 1.00

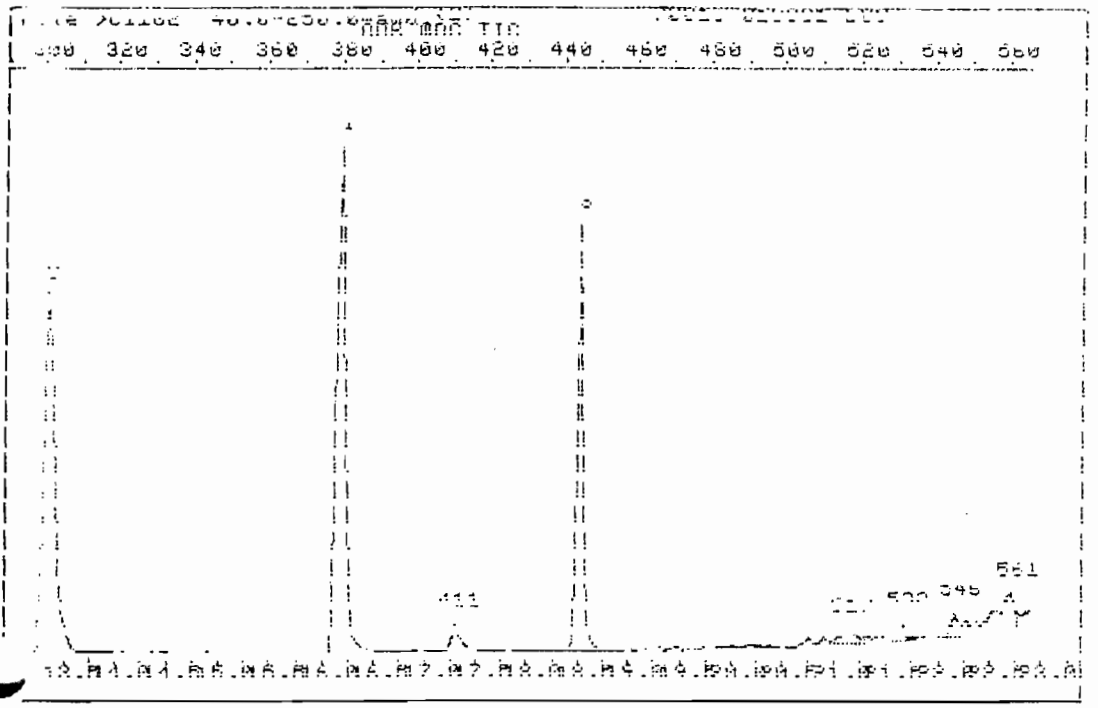
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

5:19 PM MON., 23 APR., 2>.1

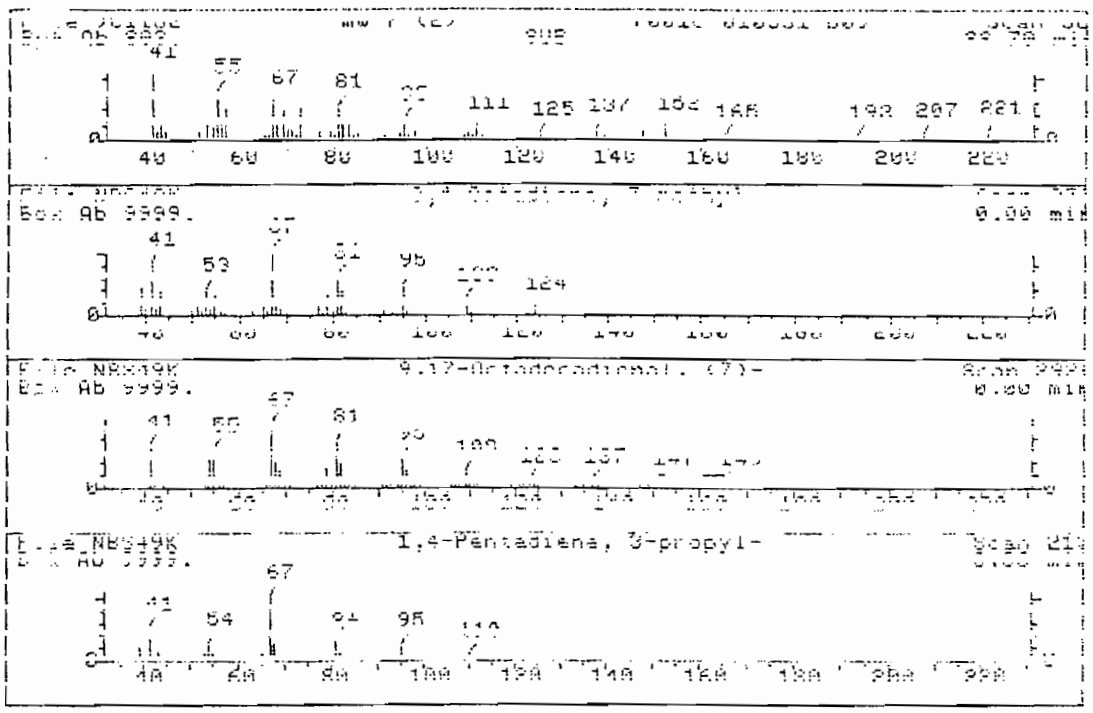




Instrument ID: 7001 Analyzed on: 4/16/01 14:52



Instrument ID: 7111 Analyzed on: 4/18/11 14:57



Unknown

Instrument ID: 7000 Analyzed on: 4/18/01 14:52
Result # in PBM results file: U1162
Retention Time: 22.20 Area: 88949 Tentative Conc: 2.00
The unknown area is 14.00% of the nearest internal standard

1. 3,4-Octadiene, 2-methyl-	124	C9H16
2. 9,17-Octadecadienal, (Z)-	264	C18H32O
3. 1,4-Pentadiene, 3-propyl-	110	C8H14
4. Cyclohexanone, 2-methyl-5-(1-methylethenyl)-, trans-	152	C10H16O
5. Cyclohexanone, 2-methyl-5-(1-methylethenyl)-	152	C10H16O
6. Cyclopentane, ethenyl-	96	C7H12

Sample file: >C1162 Spectrum #: 961
Search speed: 1 Tuning option: N No. of ion ranges searched: 00

	Prob.	CAS #	CON #	Run#	K	DK	#Fit	Tot	%	CON	C I R IO
1.	62*	3705[illegible]8	3489	NB549K	64	92	11	11	49	49	20
2.	42	5655[illegible]59	3722	NB549K	63	67	2	11	46	25	17
3.	42*	9968[illegible]8	3480	NB549K	95	83	11	11	58	38	17
4.	41*	5948[illegible]49	3667	NB549K	52	67	1	11	31	43	14
5.	41*	2764[illegible]13	19798	NB549K	50	61	1	11	33	45	14
6.	41*	3742345	3466	NB549K	36	59	11	11	58	41	14

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8(1)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(1)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1155
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	4.	BJ
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	J
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	62.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	490.	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-8(1)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(1)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1155
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN OXYGENATED CMPND	17.29	5.	J
2.	- -	UNKNOWN	19.99	6.	J
3.	- -	UNKNOWN	20.86	50.	J
4.	- -	UNKNOWN HYDROCARBON	21.51	9.	J
5.	- -	UNKNOWN	22.12	20.	J
6.	- -	UNKNOWN	22.27	20.	J
7.	- -	UNKNOWN HYDROCARBON	22.52	30.	J
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
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20.					
21.					
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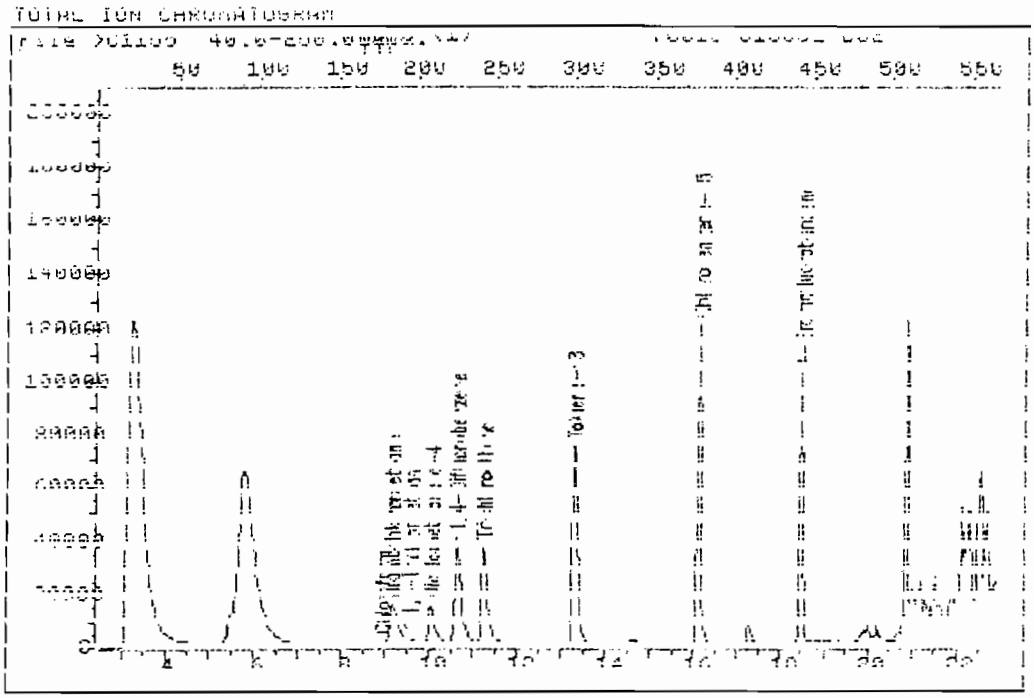
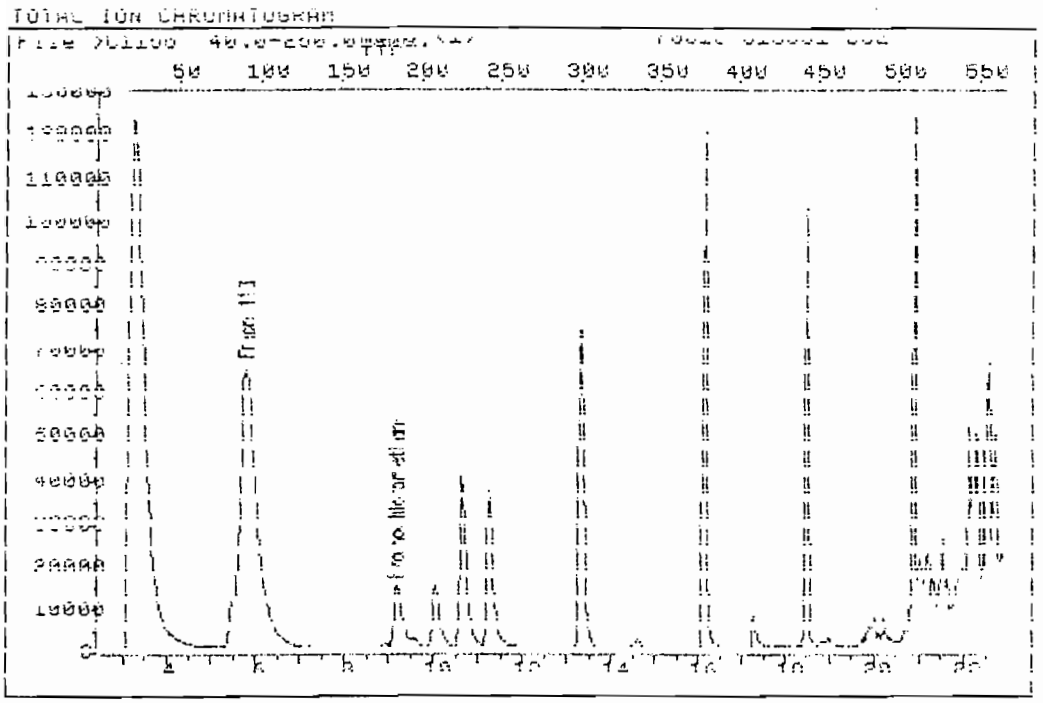
29.					
30.					



Data File: >C1:55::03 Quant Output File: ^C1:55::QT
Name: mw-8 (1) Instrument ID: .301 (.
Misc: 70010 010331 b02

Id File: HS91..::MT
Title: HP 600A Continuing Calibration Standard
Last Calibration: 000810 08:51 Last Qcal Time: **1-Jul6 0?: ?

Operator ID: MANAGER
Quant Time : 010406 11:? .
Injected at: **0406 11:27



Data File: >C1155::D3
Name: mw-8 (1)
Misc: 7001c 010331 b02

Quant Output File: 'C1155::QT
Instrument ID: >401 1.

Id File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: :

Last Qcal Time: **0406 15:

Operator ID: MANAGER
Quant Time : 010423 16:
Injected at: **0406 11:27

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 0106-06 11: 0
Output File: ^C1155::QT Injected at: **0406 11:27
Data File: >C1155::03 Dilution Factor: 1.0000
Name: mw-8 (1) Instrument ID: 7001 C
Misc: 7001c 010531 m02

ID File: ID591C::M1
Title: HP 5970 Continuing Calibration standa
Last Calibration: 000810 08:51 Last Qcal Time: **0406 09:59

	Compound	R.T.	Q ion	Area	Conc	Units	%
1)	*Bromochloromethane	9.14	128.0	19974	50.000	ng	7
1b)	Chloroform	8.95	83.0	6174	4.21	ug	99
19)	1,2-Dichloroethane-d4	10.04	65.0	62796	47.64	ng	9
22)	*1,4-Difluorobenzene	10.62	114.0	129979	50.000	ug	97
23)	1,1,1-Trichloroethane	9.52	97.0	5686	4.26	ug	1
29)	Trichloroethene	11.23	130.0	42408	62.50	ug	99
36)	*Chlorobenzene-d5	16.14	117.0	144478	50.000	ng	7
42)	Toluene d-8	15.29	98.0	127164	49.85	ug	99
48)	Bromofluorobenzene	18.48	95.0	87674	49.47	ng	1

* Compound is (ISTD)

QUANT REPORT Page 1

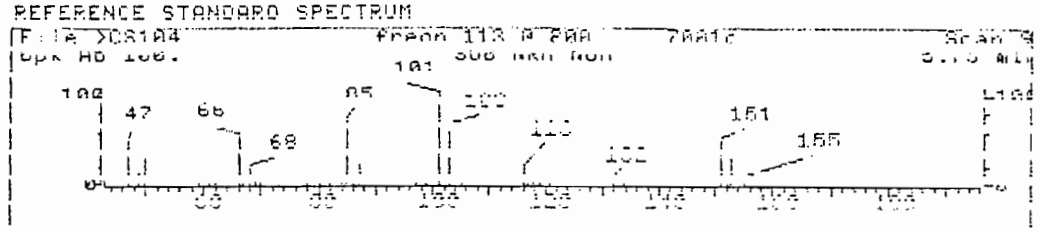
Operator ID: MANAGER Quant Rev: 7 Quant Time: 011493 16:17
Output File: 'C1155::QT Injected at: **0406 11:27
Data File: >C1155::03 Dilution Factor: 1.0000
Name: mw-8 (1) Instrument ID: 7001 C
Misc: 7001c 011531 b02

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **0406 19:22

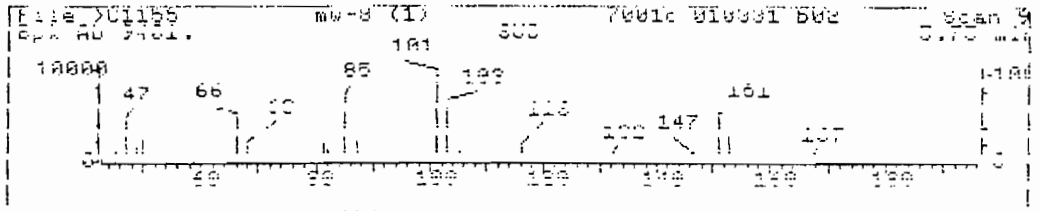
	Compound	R.T.	Q ion	Area	Conc	Units	%
1)	*Bromochloromethane	9.14	128.0	15810	50.000	ng	
2)	Freon 113	5.29	101.0	226192	444.42	UG	94

* Compound is ISTD

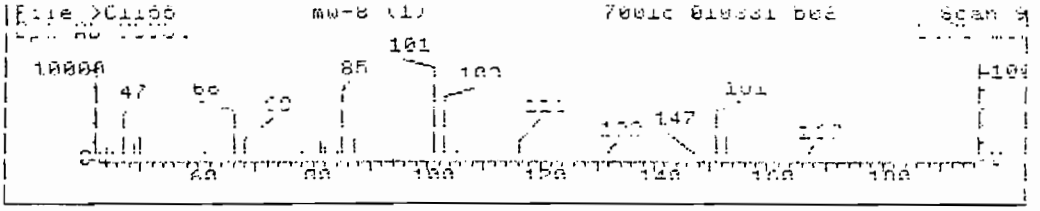
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



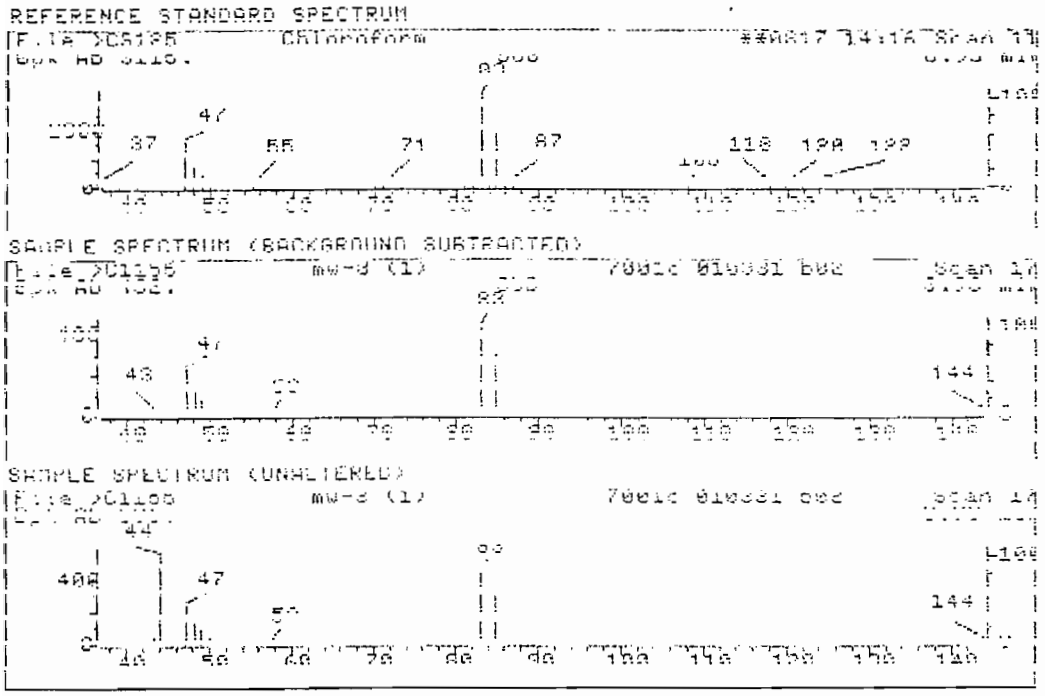
SAMPLE SPECTRUM (UNALTERED)



Data File: >C1155::03
Name: mw-8 (1)
Misc: 7001c 010331 b02
Quant Time: 010423 16:37
Injected at: **0406 11:27
Last Qcal Time: **0406 15:42

Quant Output File: 'C1155::Q1
Instrument ID: 7001 1.
Quant ID File: DATA13::C1
Last Calibration: :

Compound No : 2
Compound Name : Freon 1
Scan Number : 91
Retention Time: 5.25 mi
Quant Ion : 101.0
Area : 2261
Concentration : 494.42 UG
q-value : 94

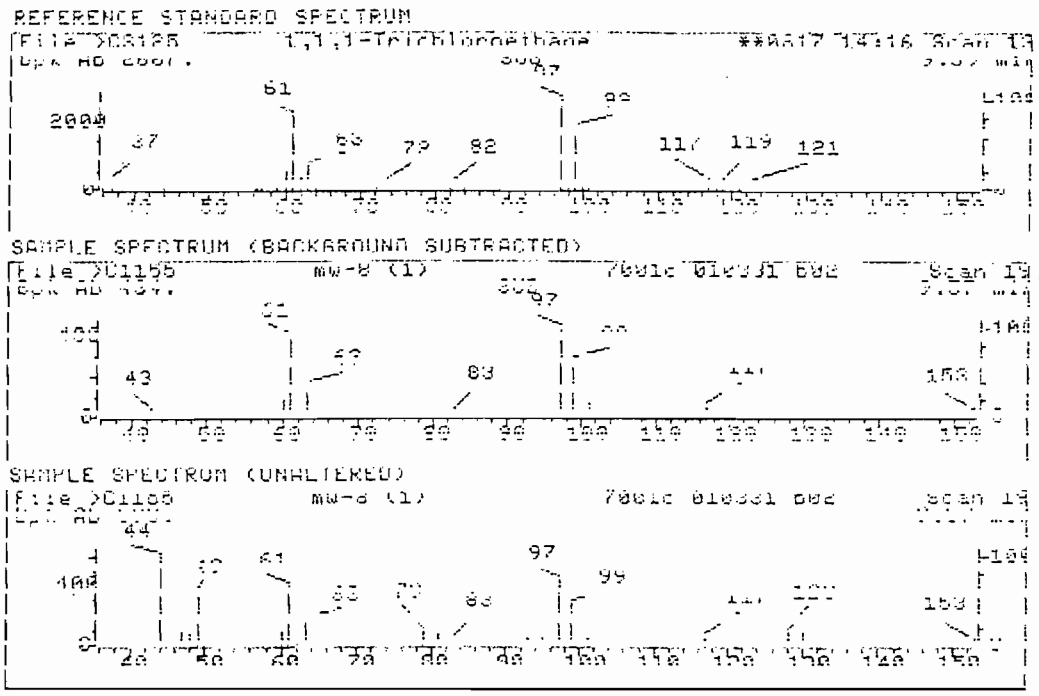


Data File: >C:\55::03
Name: mw-8 (1)
Misc: 7001c 010331 b02
Quant Time: 010406 11:50
Injected at: **0406 11:22
Last Qcal Time: **0406 09:53

Quant Output File: ^C:\55::NT
Instrument ID: >101 1.

Quant ID File: C:>910::.1
Last Calibration: 000410 08:51

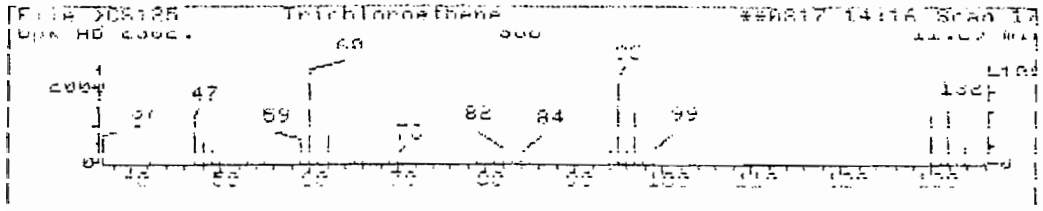
Compound No : 18
Compound Name : Chloroform
Scan Number : 179
Retention Time: 8.93 min.
Quant Ion : 85.0
Area : 61.4
Concentration : 4.21 ug
q-value : 95



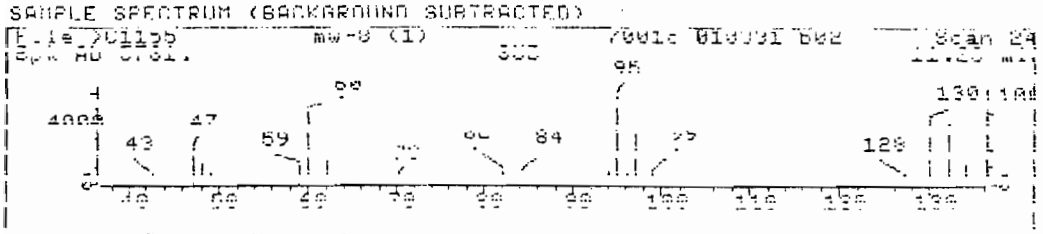
Data File: >C:\55::03 Quant Output File: ^C:\55::Q1
Name: mw-8 (1) Instrument ID: ...01 ..
Misc: 7001c 010331 b02
Quant Time: 010406 11:50 Quant ID File: ..\910...
Injected at: **0406 11:27 Last Calibration: 000410 08:51
Last Qcal Time: **0406 09:53

Compound No : 23
Compound Name : 1,1,1-Trichloroethane
Scan Number : 197
Retention Time: 9.57 min
Quant Ion : 97.0
Area : 5600
Concentration : 4.76 UG
q-value : 92

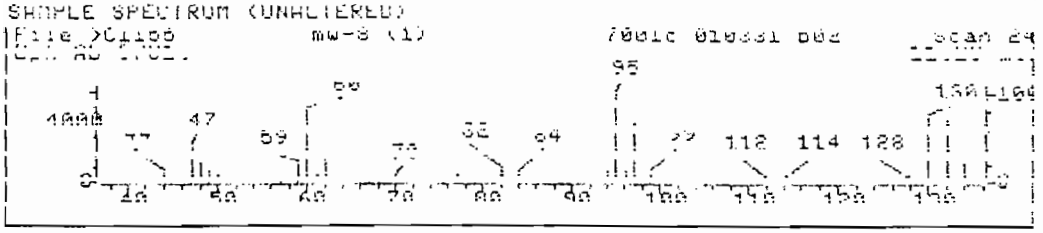
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >C1155::05 Quant Output File: ^C1155::QT
Name: mw-8 (1) Instrument ID: >101 L
Misc: 7001c 010331 b02
Quant Time: 010406 11:50 Quant ID File: [[>910::[[[
Injected at: **0406 11:22 Last Calibration: 0000810 08:21
Last Qual Time: **0406 09:53

Compound No : 29
Compound Name : Trichloroethene
Scan Number : 249
Retention Time: 11.23 min.
Quant Ion : 130.0
Area : 4241.4
Concentration : 62.50 UG
q-value : 93

MS data file header from : >C1155::03

Sample: mw-8 (1) Operator: MANAGER SUPER GRP. 4/08/01 11:57
Misc : 7001c 010331 b02
Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7001 C
Method file: METH03 Tuning file: MT9003 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	>>0.	>>0.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	8.0	.2	8.0

>C1155 mw-8 (1) 7001c 010331 b02
40.01 >>0.0 LLP TIC
Upslope: .2000 Area Reject: 18>69. Max Peaks: 12 Bunch: -1 Valley >100 %
Unslope: 0.0000 Results File IC1155 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	3.23	12	21	61	123590	311>>28	>>83917	100.00	47.1[illegible]
2	5.75	78	91	124	64600	1868229	17>6992	56.36	26.595
3	17.29	404	411	425	7661	101846	62765	2.02	.9>>
4	19.99	475	486	488	6485	117649	71169	2.31	1.09[illegible]
5	20.2[illegible]	490	492	499	5852	76909	36>>9	1.19	.56>
6	20.86	499	510	513	121933	681565	618862	20.08	9.476
7	21.18	517	519	521	11743	161142	47998	1.5[illegible]	.7[illegible]
8	21.51	525	528	533	16415	284014	187759	3.50	1.650
9	21.87	535	538	540	7890	172690	51426	1.67	.7[illegible]2
10	22.12	542	545	547	33558	39>>99	192217	6.24	2.945
11	22.27	547	549	552	33254	38[illegible]>5	196014	6.3[illegible]	>.0[illegible]
12	22.52	552	556	558	49209	556>00	327>9[illegible]	10.64	5.019

Sum of corrected areas: 6531192.

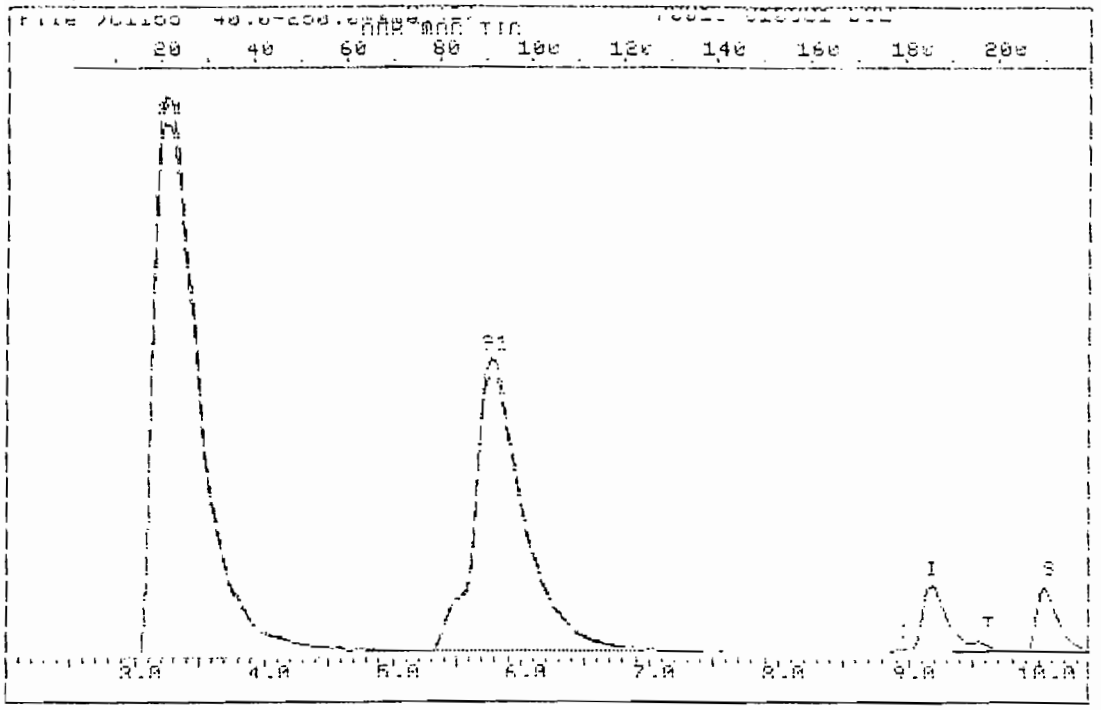
Summary of Unknowns PBM Library Search and Quantitation

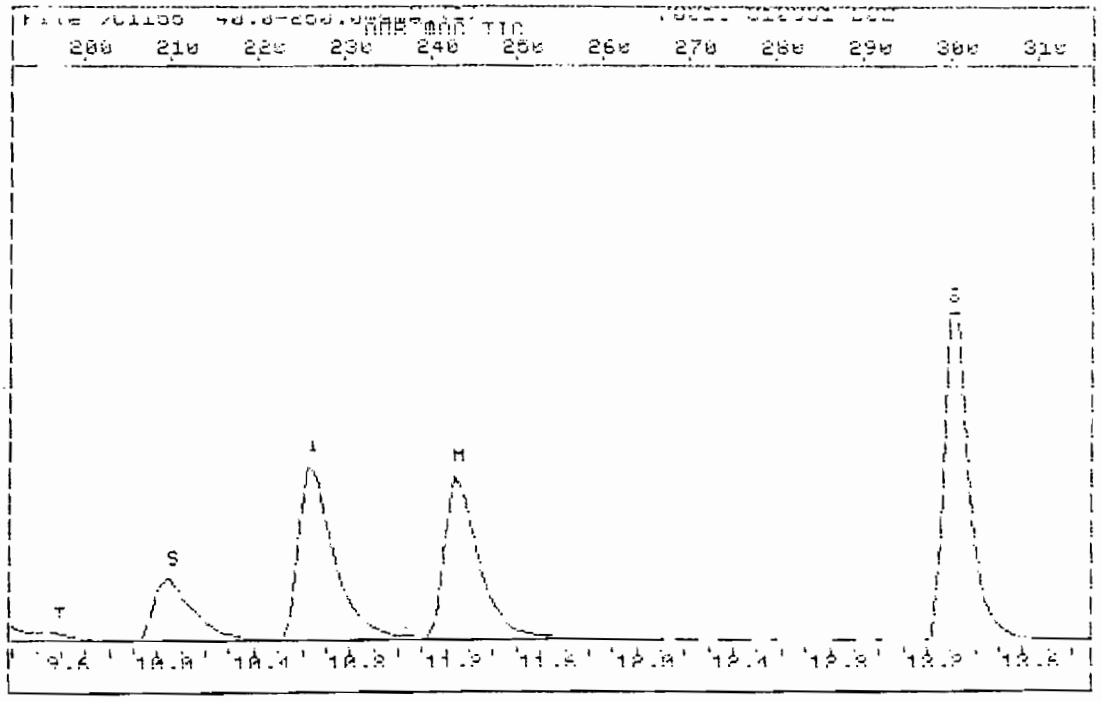
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	183>94.	9.14	2.51 - 9.8[illegible]
2	50.0	416536.	10.62	9.88 - 13.38
3	50.0	617572.	16.14	13.38 - 22.88

Dilution Factor = 1.00 This sample was 1000.00 g or ml

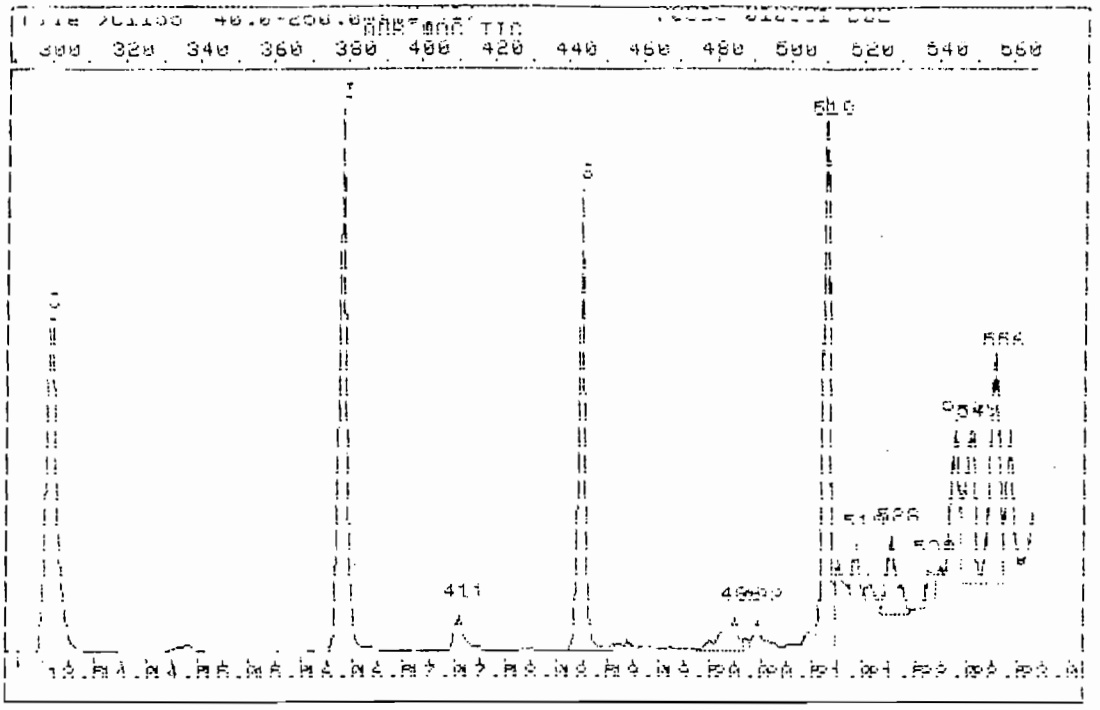
Correction Factor = 1.00

$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

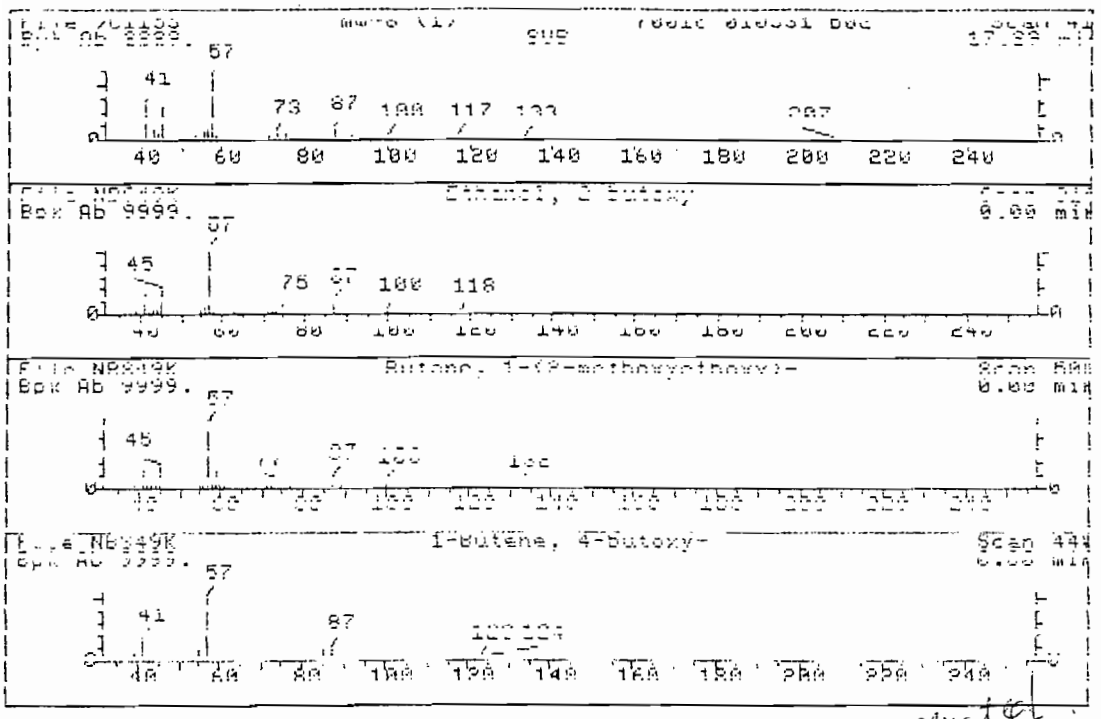




Instrument ID: 7011 Analyzed on: 4/16/01 11:27



Instrument ID: 7011 Analyzed on: 4/06/01 11:27



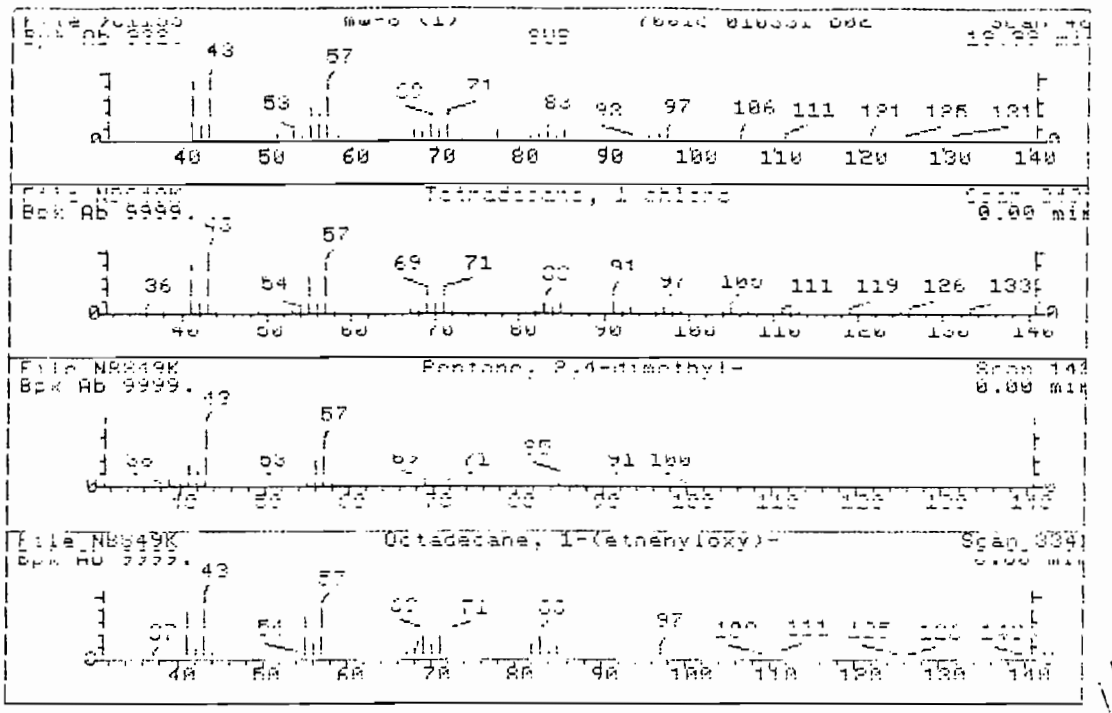
oxygenated

Instrument ID: 7001 Analyzed on: 4/06/01 11:27
Result 3 in PBM results file: LC1155
Retention Time: 17.29 Area: 62265 Tentative Conc: 5.00
The unknown area is 10.08% of the nearest internal standard

1.	Ethanol, 2-butoxy-	118 C6H14O2
2.	Butane, 1-(2-methoxyethoxy)-	134 C7H16O2
3.	1-Butene, 4-butoxy-	126 C8H16O
4.	Ethanol, 2-(2-butoxyethoxy)-	162 C8H18O3
5.	Butane, 1-(methylsulfonyl)-	136 C5H12O2S
6.	Propane, 2-methyl-1-propoxy-	116 C7H16O

Sample file: >C1155 Spectrum #: 411
Search speed: 1 Tilting option: N No. of ion ranges searched: 55

	Prob.	CAS #	CON #	RLIBT	K	DK	#Fits	Tilt	%	CON	C	R	IV
1.	52	111762	7269	NBS49K	58	49	1	0	96	20	20	4	
2.	36*	13343981	7325	NBS49K	22	73	2	0	100	26	14	15	
3.	26	54061762	7289	NBS49K	37	58	1	0	70	41	8	14	
4.	26	112345	7407	NBS49K	33	52	1	0	45	36	10		
5.	25*	7560590	70	NBS49K	28	73	1	0	81	46	7		
6.	11*	15768492	7260	NBS49K	26	60	2	0	56	61	2		

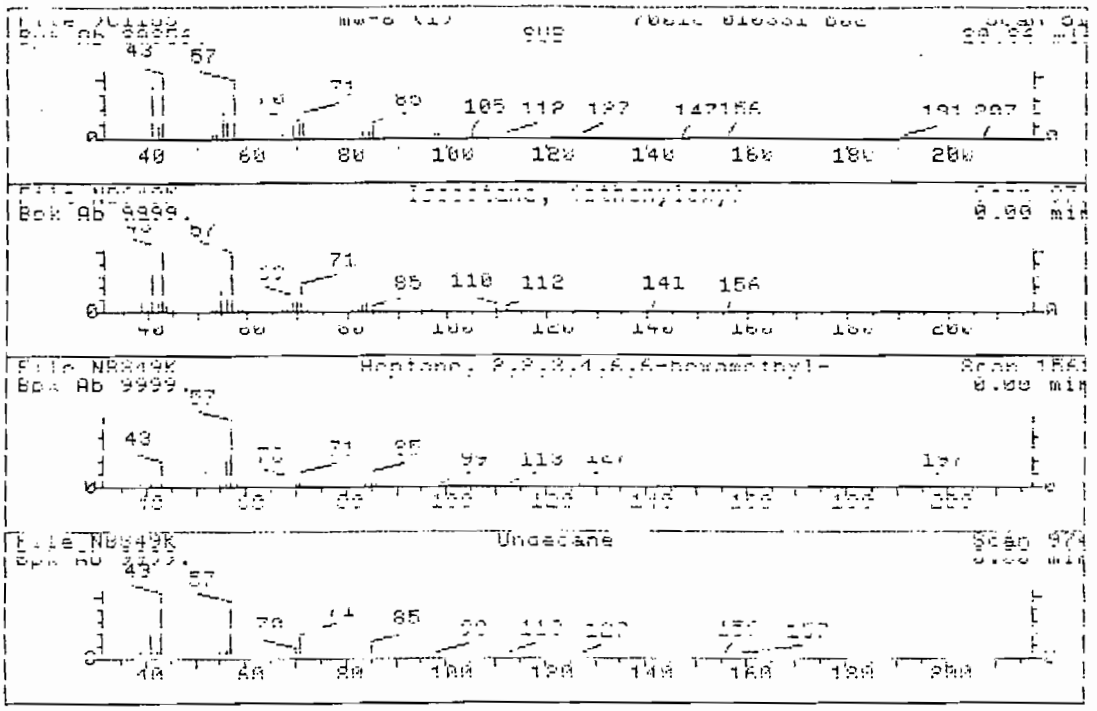


Instrument ID: 7001 Analyzed on: 4/06/01 11:22
Result 4 in PBM results file: LC1155
Retention Time: 19.99 Area: 21165 Tentative Conc: 6.00
The unknown area is 11.52% of the nearest internal standard

1. Tetradecane, 1-chloro-	25%	C14H29Cl
2. Pentane, 2,4-dimethyl-	100	C7H16
3. Octadecane, 1-(ethenyloxy)-	29%	C20H40O
4. 1-Hexene, 4-methyl-	9%	C7H14
5. Propane, 2-isocyano-2-methyl-	8%	C5H9N

Sample file: >C1155 Spectrum #: 4R6
Search speed: 1 Tuning option: N No. of ion ranges searched: 49

	Prob.	CAS #	CON #	RUN	K	DK	#FLG	TILT	%	CON	C	I	R	O
1.	58	2425549	6839	NBS49K	79	55	2	0	81	20	25	21		
2.	28	108087	1063	NBS49K	42	42	2	0	91	38	10	14		
3.	15	930029	6877	NBS49K	57	69	1	0	35	58	3	15		
4.	15*	3769231	1042	NBS49K	29	64	1	0	64	58	3	14		
5.	15*	7188387	3545	NBS49K	26	62	2	0	85	60	3	14		



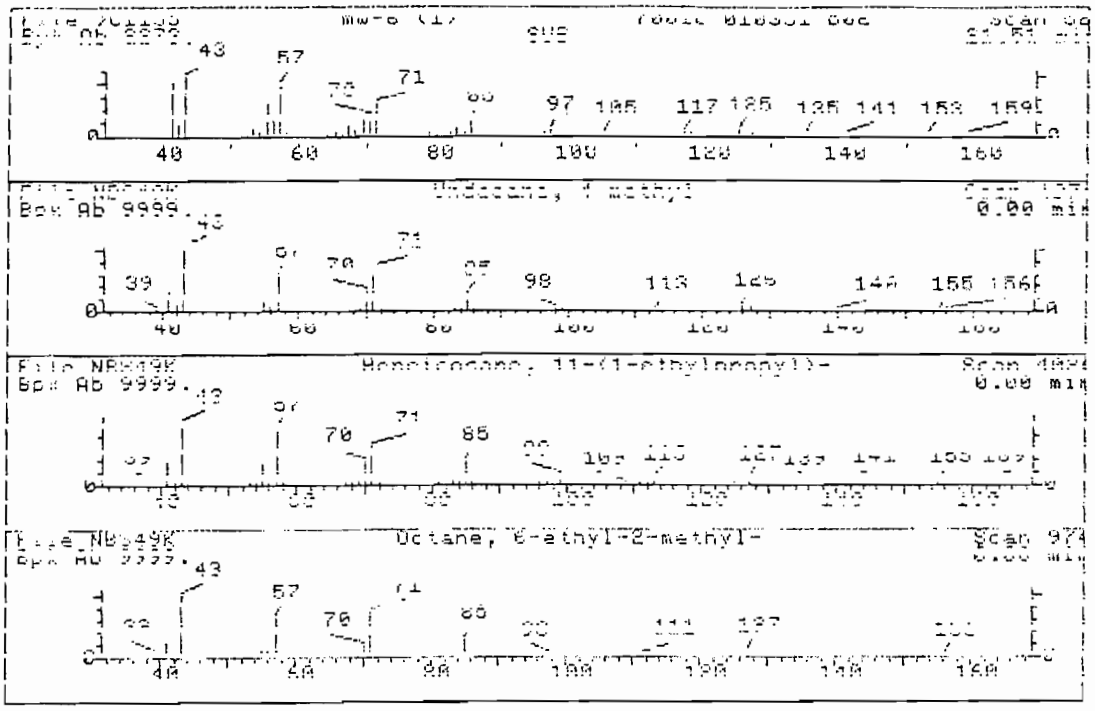
unk.
Hydrocarbon

Instrument ID: 7001 Analyzed on: 4/06/01 11:22
Result 5 in PBM results file: L1155
Retention Time: 20.86 Area: 618862 Tentative Conc: 50.00
The unknown area is 100.21% of the nearest internal standard

1.	Isooctane, (ethenyloxy)-	156 C10H20O
2.	Heptane, 2,2,3,4,6,6-hexamethyl-	184 C13H28
3.	Undecane	156 C11H24
4.	Decane, 2,9-dimethyl-	170 C12H26
5.	Decane, 4-methyl-	156 C11H24
6.	2-Decen-1-ol, (E)-	156 C10H20O

Sample file: >C1155 Spectrum #: 510
Search speed: 1 Tilting option: N No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROUT	K	DK	#Fit	Tilt	%	Chn	C	R	IU
1.	48*	32769623	4352	NBS49K	48	55	2	0	82	23	17		9
2.	41	62108321	1211	NBS49K	35	52	0	0	66	26	14		18
3.	41*	1120714	6682	NBS49K	55	62	0	0	87	41	14		32
4.	37	1002171	6738	NBS49K	47	45	2	0	77	26	14		
5.	36*	2847725	4398	NBS49K	29	72	3	0	100	30	14		
6.	36*	18409182	4077	NBS49K	29	87	3	0	90	26	14		12



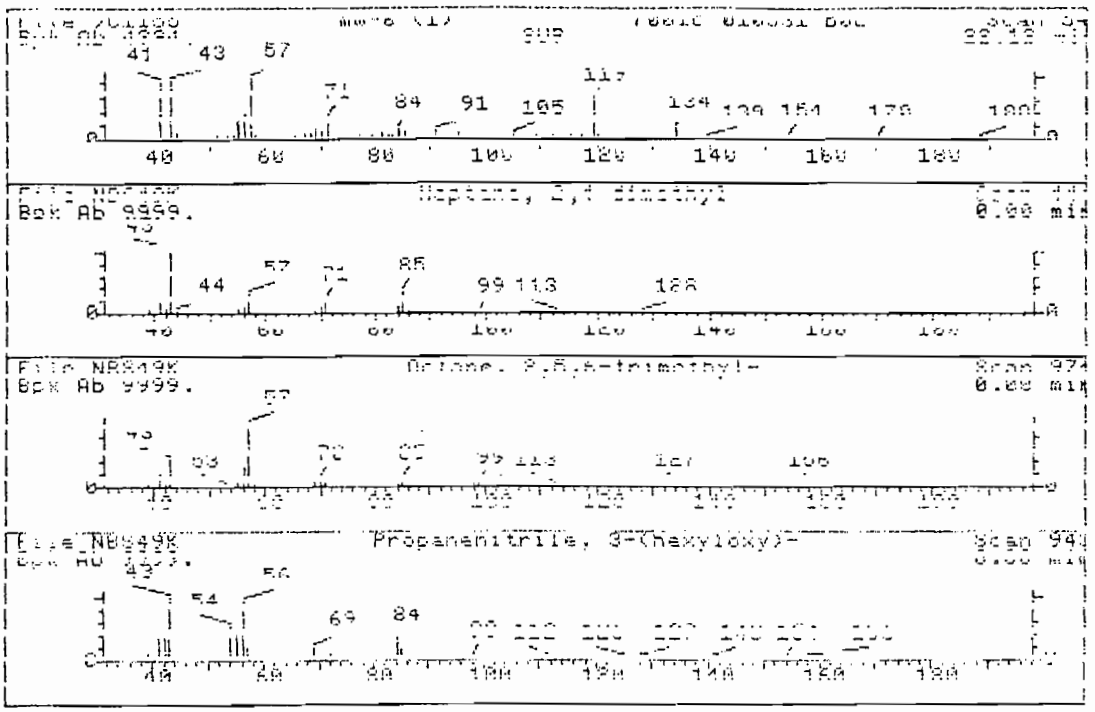
Hydrocarbon

Instrument ID: 7HHT Analyzed on: 4/HA/01 11:22
Result 6 in rBM results file: LCJ155
Retention Time: 21.51 Area: 10/759 Tentative Conc: 9.00
The unknown area is 17.45% of the nearest internal standard

1. Undecane, 4-methyl- 1/H C12H26
2. Heneicosane, 11-(1-ethylpropyl)- :n6 C26r.4
3. Octane, 6-ethyl-2-methyl- 15A C11H24
4. 1-Nonene, 4,6,R-trimethyl- :nR C1?H 4
5. Nonane, 3,?-dimethyl- 156 C11H24
6. Pentane, 2,3,3-trimethyl- 114 C8H1

Sample file: >C1155 Spectrum #: 52R
Search speed: 1 Tilting option: N No. of ion ranges searched: 5

	Prob.	CAS #	CON #	RUNT	K	Dk	#Fits	Tilt	%	CON	C I R IU
1.	55	2980690	6734	NBS49K	48	46	0	0	65	25	22
2.	42	55282116	6910	NHS49K	62	8R	2	0	59	2?	17 13
?.	34	62016197	6681	NBS49K	47	43	1	0	66	34	12
4.	33	54410989	6721	NHS49K	56	41	1	0	79	4R	10 19
5.	31	17302?28	6677	NBS49K	55	32	2	0	71	42	8 ?
6.	30	560214	6557	NHS49K	41	47	2	0	9?	34	12 13



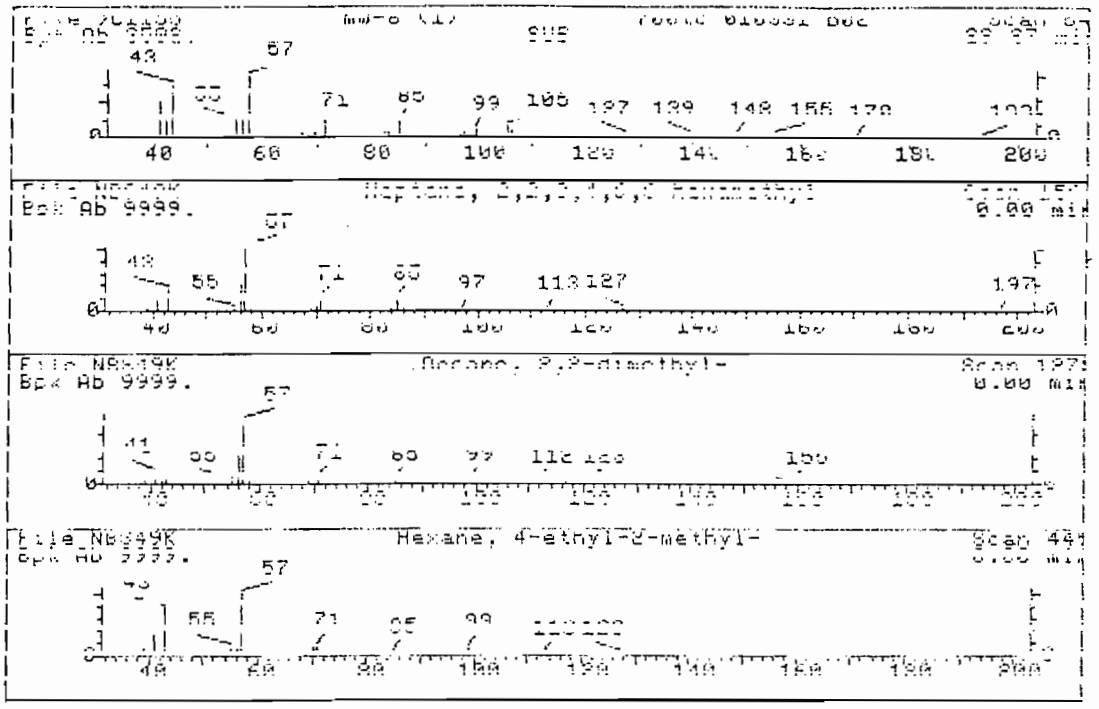
Unknown

Instrument ID: 7001 Analyzed on: 4/18/01 11:27
Result 7 in PBM results file: LC1155
Retention Time: 22.12 Area: 19217 Tentative Conc: 16.00
The unknown area is 31.12% of the nearest internal standard

1.	Heptane, 2,4-dimethyl-	128 C9H20
2.	Octane, 2,5,6-trimethyl-	156 C11H24
3.	Propanenitrile, 3-(hexyloxy)-	155 C9H17NO
4.	2-Undecene, 6-methyl-, (Z)-	168 C12H24
5.	Undecane, 5-methyl-	170 C12H26
6.	Benzene, 2-ethyl-1,4-dimethyl-	134 C10H14

Sample file: >C1155 Spectrum #: 545
Search speed: 1 Tilting option: N No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROUT	K	DK	#Fit	Tilt	%	Con	C	R	IV
1.	24*	2213232	6599	NBS49K	24	63	3	0	255	44	8	7	
2.	20	62016142	6680	NBS49K	39	48	1	0	100	52	5	14	
3.	20*	5327026	1175	NBS49K	20	68	2	0	44	55	5	12	
4.	15	74630436	1181	NBS49K	41	49	2	0	42	57	3		
5.	15*	1632708	6740	NBS49K	37	46	0	0	29	65	3		
6.	15*	1758889	13535	NBS49K	62	17	1	0	49	67	5	24	

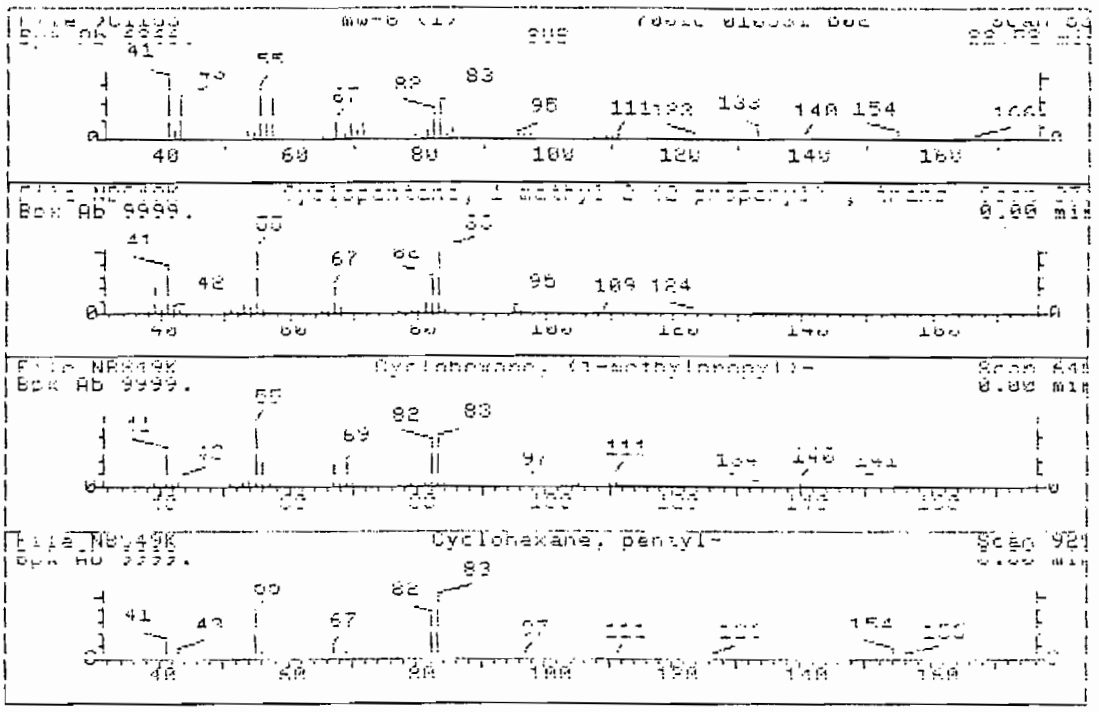


Instrument ID: 7001 Analyzed on: 4/18/01 11:22
Result 8 in PBM results file: LC1195
Retention Time: 22.27 Area: 196014 Tentative Conc: 16.00
The unknown area is 31.74% of the nearest internal standard

1.	Heptane, 2,2,3,4,6,6-hexamethyl-	184 C13H28
2.	Decane, 2,2-dimethyl-	170 C12H26
3.	Hexane, 4-ethyl-2-methyl-	128 C9H20
4.	Propane, 2-methyl-1-nitro-	103 C4H9NO2
5.	Pentane, 2,2,4,4-tetramethyl-	128 C9H20
6.	Methane, isocyanato-	57 C2H NO

Sample file: >C1195 Spectrum #: 549
Search speed: 1 Tilting option: N No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROUT	K	DK	#PKS	TIC	%	CON	C	R
1.	41	62108321	1211	NBS49K	38	49	2	0	84	22	17	2
2.	40	17302373	1194	NBS49K	33	42	0	0	75	31	14	12
3.	38*	3074757	9710	NBS49K	41	48	2	0	84	33	16	1
4.	28*	625741	1240	NBS49K	23	26	1	0	131	36	10	14
5.	28	107087??	1298	NBS49K	27	42	0	0	97	36	10	14
6.	28*	624839	1000	NBS49K	22	42	1	0	91	36	10	14



Instrument ID: 7001 , Analyzed on: 4/16/01 11:22
Result 9 in PBM results file: LC1195
Retention Time: 22.52 Area: 32798 Tentative Conc: 22.00
The unknown area is 53.08% of the nearest internal standard

1. Cyclopentane, 1-methyl-2-(2-propenyl)-, trans- 124 C9H16
2. Cyclohexane, (1-methylpropyl)- 140 C10H20
3. Cyclohexane, pentyl- 154 C11H22
4. Cyclohexane, (1-methylethyl)- 126 C9H18
5. Cyclohexane, 2-propenyl- 124 C9H16
6. Cyclohexane, 1-propenyl- 124 C9H16

Sample file: >C1195 Spectrum #: 556
Search speed: 1 Tilting option: N No. of ion ranges searched: 5

	Prob.	CAS #	CON #	ROUT	K	DK	#FIG	THIT	%	CON	C I R IV
1.	64*	50746532	6173	NBS49K	72	29	1	0	59	44	24
2.	31	7058017	6187	NBS49K	57	44	2	0	65	31	12
3.	28*	4292926	6202	NBS49K	29	66	1	0	51	41	8
4.	26	696297	6181	NBS49K	43	51	1	0	63	41	8
5.	25	2114423	6172	NBS49K	45	54	1	0	58	50	7
6.	25	5364830	6171	NBS49K	59	41	2	0	68	50	7

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8(1) DL

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(1) DL
Sample wt/vol: 1.000 (g/mL) ML Lab File ID: C1191
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/09/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50.	U
74-83-9	Bromomethane	50.	U
75-01-4	Vinyl Chloride	50.	U
75-00-3	Chloroethane	50.	U
75-09-2	Methylene Chloride	25.	U
67-64-1	Acetone	50.	U
75-15-0	Carbon Disulfide	25.	U
75-35-4	1,1-Dichloroethene	25.	U
75-34-3	1,1-Dichloroethane	25.	U
156-60-5	1,2-Dichloroethene-trans	25.	U
67-66-3	Chloroform	13.	BJ
107-06-2	1,2-Dichloroethane	25.	U
78-93-3	2-Butanone	50.	U
71-55-6	1,1,1-Trichloroethane	25.	U
56-23-5	Carbon Tetrachloride	25.	U
75-27-4	Bromodichloromethane	25.	U
78-87-5	1,2-Dichloropropane	25.	U
10061-01-5	cis-1,3-Dichloropropene	25.	U
79-01-6	Trichloroethene	55.	
124-48-1	Dibromochloromethane	25.	U
79-00-5	1,1,2-Trichloroethane	25.	U
71-43-2	Benzene	25.	U
10061-02-6	trans-1,3-Dichloropropene	25.	U
75-25-2	Bromoform	25.	U
108-10-1	4-Methyl-2-Pentanone	50.	U
591-78-6	2-Hexanone	50.	U
127-18-4	Tetrachloroethene	25.	U
79-34-5	1,1,2,2-Tetrachloroethane	25.	U
108-88-3	Toluene	25.	U
108-90-7	Chlorobenzene	25.	U
100-41-4	Ethylbenzene	25.	U
100-42-5	Styrene	25.	U
156-59-2	1,2-Dichloroethene-cis	25.	U
106-42-3	m,p-Xylenes	25.	U
95-47-6	o-Xylene	25.	U
76-13-1	Freon 113	510.	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

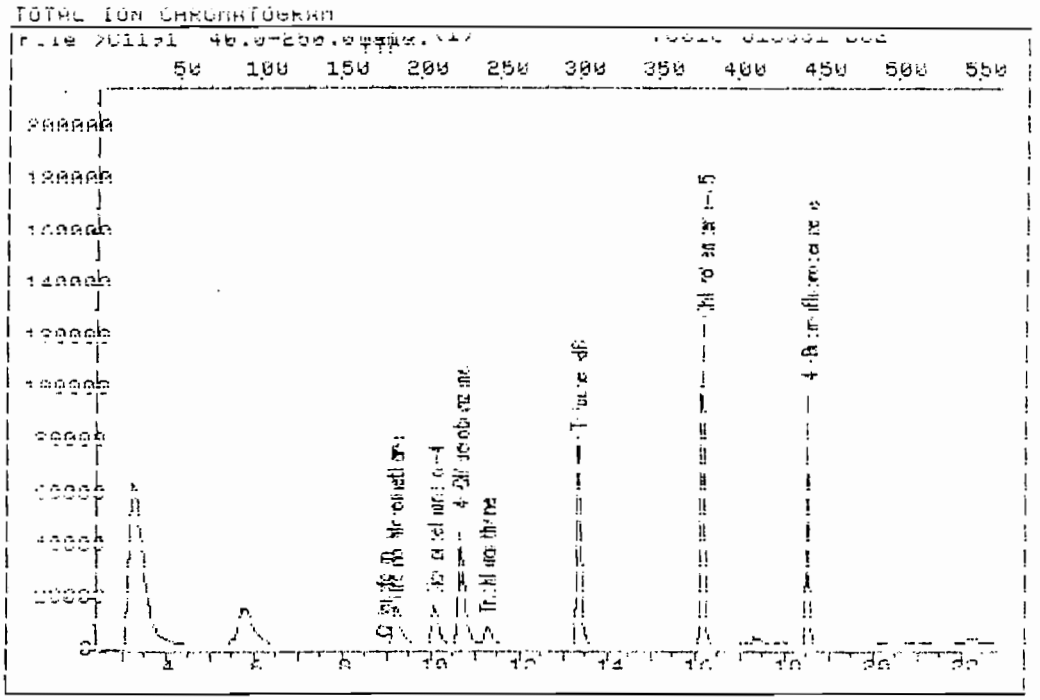
MW-8(1) DL

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(1) DL
Sample wt/vol: 1.000 (g/mL) ML Lab File ID: C1191
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/09/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

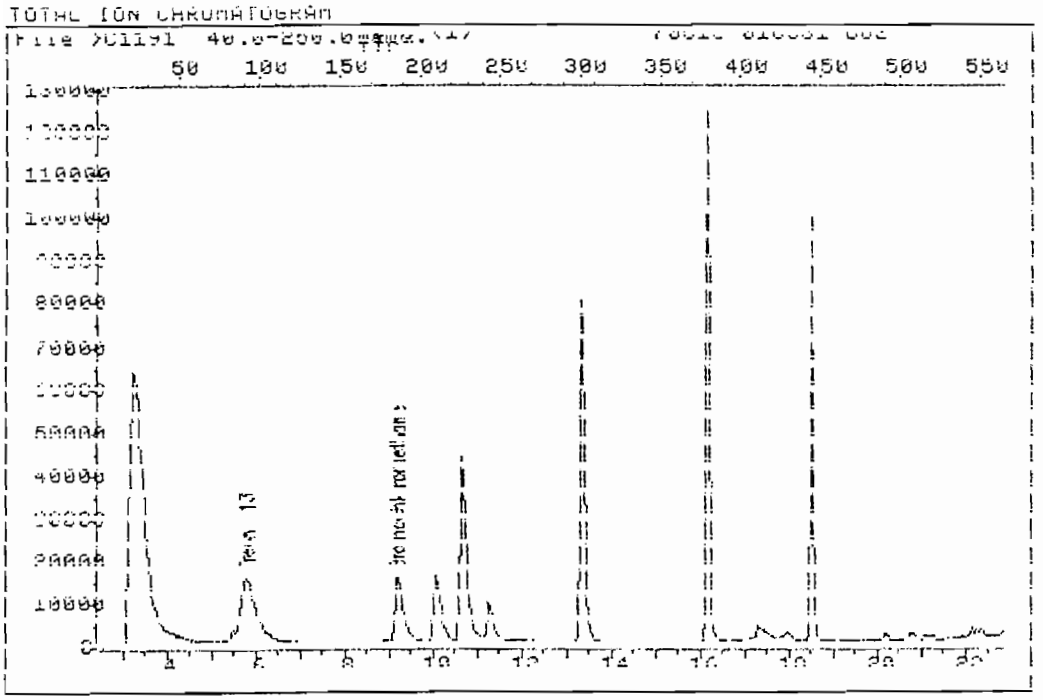
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					



Data File: >C:\191::03 Quant Output File: >C:\191::QT
Name: mw-8 (1) Instrument ID: >n01 :.
Misc: 7001c 010331 b02

Id File: HP5910::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000M10 08:51 Last Acal Time: **:--09 1:::-4

Operator ID: MANAGER
Quant Time : 010409 13:nn
Injected at: **0409 12:43



Data File: >C:\191::D3 Quant Output File: 'C:\191::QT
Name: mw-8 (1) Instrument ID: 7401 C
Misc: 7001c 010331 b02

Id File: \DF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qual Time: **:--09 11:45

Operator ID: MANAGER
Quant Time : 010423 11:49
Injected at: **0409 12:43

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 01-Jan-91 12:00
Output File: ^C1191::QT Injected at: **0409 12:45
Data File: >C1191::D3 Dilution Factor: 1.0000
Name: mw-8 (1) Instrument ID: 7001 C
Misc: 7001c 010331 b02

ID File: IDS91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Qcal Time: **0409 11:44

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.18	128.0	16151	50.00	ug	00
18)	Chloroform	8.93	83.0	4360	2.67	UG	92
19)	1,2-Dichloroethane-d4	10.08	65.0	24792	54.29	ug	94
27)	*1,4-Difluorobenzene	10.66	114.0	128594	50.00	UG	99
29)	Trichloroethene	11.27	130.0	8232	11.89	ug	94
36)	*Chlorobenzene-d5	16.12	117.0	148829	50.00	UG	94
42)	Toluene d-8	13.32	98.0	181944	44.33	ug	98
48)	Bromofluorobenzene	18.51	95.0	87447	47.64	UG	78

* Compound is ISTD

QUANT REPORT Page 1

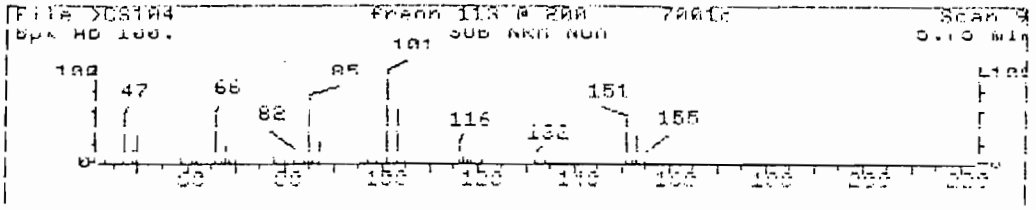
Operator ID: MANAGER Quant Rev: 7 Quant Time: 010423 11:42
Output File: 'C1191::QT Injected at: **0409 12:43
Data File: >C1191::D3 Dilution Factor: 1.000000
Name: mw-8 (1) Instrument ID:' 7001 C
Misc: 7001c 010331 b02

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **0409 10:49

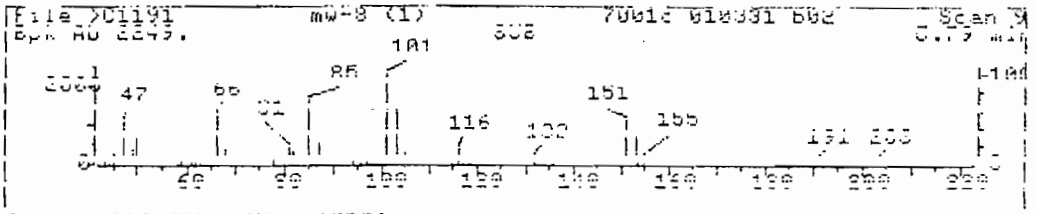
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.18	128.0	16132	50.00	ng	00
2)	Freon 113	5.79	101.0	99266	101.62	UG	99

* Compound is ISTD

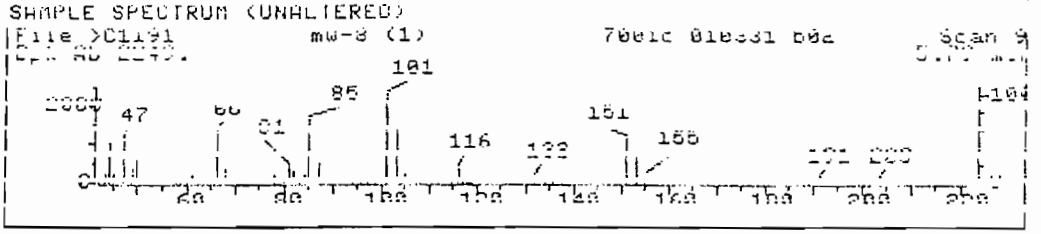
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



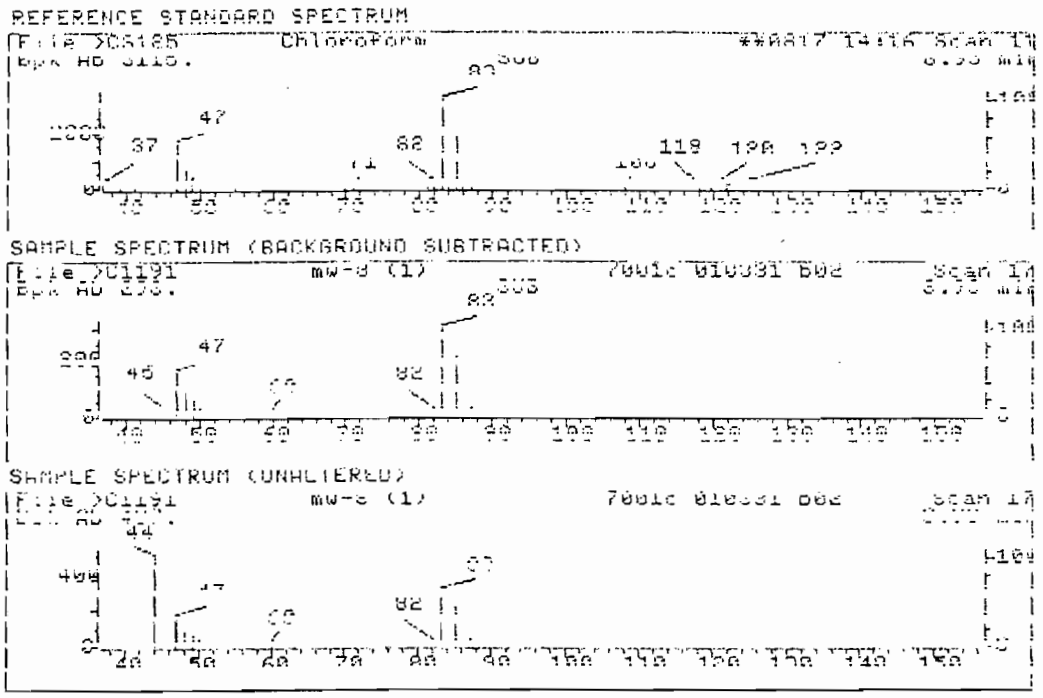
SAMPLE SPECTRUM (UNALTERED)



Data File: >C1191::D3
Name: mw-8 (1)
Misc: 7001c 010331 b02
Quant Time: 010423 11:42
Injected at: **0409 12:43
Last Qcal Time: **0409 10:45

Quant Output File: >C1191::QT
Instrument ID: .401 L
Quant ID File: DF113::MT
Last Calibration: :

Compound No : 2
Compound Name : Freon 11
Scan Number : 92
Retention Time: 5.79 min.
Quant Ion : 101.0
Area : 5536nn
Concentration : 101.62 UG
q-value : 99

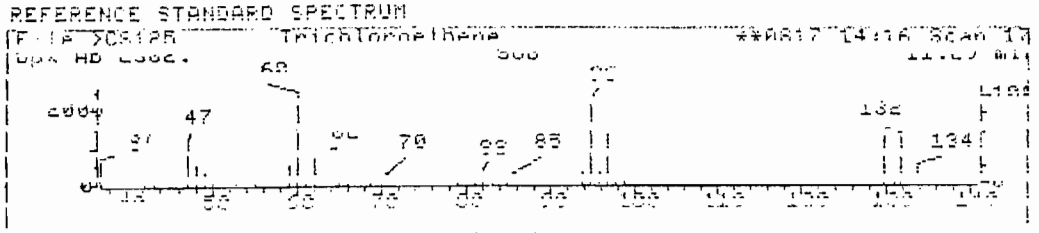


Data File: >C:\191::03
Name: mw-8 (1)
Misc: 7001c 010331 b02
Quant Time: 010409 15:06
Injected at: **0409 12:43
Last Qcal Time: **0409 11:44

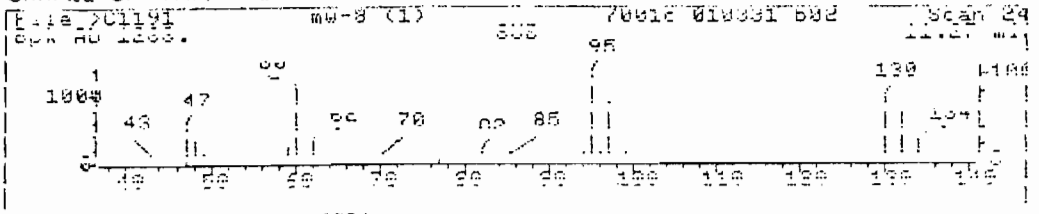
Quant Output File: >C:\191::Q
Instrument ID: >001 C
Quant ID File: C:\191C::M
Last Calibration: 000410 08:51

Compound No : 18
Compound Name : Chloroform
Scan Number : 179
Retention Time: 8.93 min.
Quant Ion : 83.0
Area : 4[illegible]
Concentration : 2.67 UG
q-Value : 92

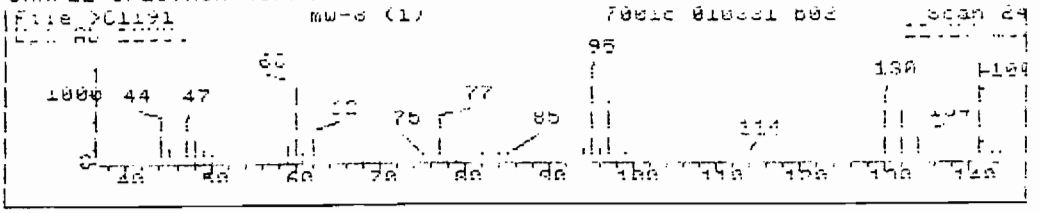
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNFILTERED)



Data File: >C1191::05
Name: mw-8 (1)
Misc: 7001c 010331 b02
Quant Time: 010409 13:06
Injected at: **0409 12:43
Last Qcal Time: **0409 11:44

Quant Output File: ^C1191::QT
Instrument ID: >101 1.
Quant ID File: D:a91L::01
Last Calibration: 000410 00:>1

Compound No : 29
Compound Name : Trichloroethene
Scan Number : 244
Retention Time: 11.27 min.
Quant Ion : 130.0
Area : 87>>
Concentration : 11.09 UG
q-value : 84

MS data file header from : >C1191::D5

Sample: mw-8 (1) Operator: MANAGER SUPER GRP. 4/0 01 [illegible]
Misc : 7001c 010331 b02
Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7001 C
Method file: METH03 Tuning file: MT9003 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	150.	250.	0.	0.
Chromatographic times, min. :	3.0	35.0	35.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0

>C1191 mw-8 (1) 7001c 010331 b02
40.01 250.0 CLP TIC
Upslope: .2000 Area Reject: 22621. Max Peaks: 4 Bunch: -1 Valley 100 %
Onslope: 0.0000 Results File C1191 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	3.23	12	21	63	63966	162[illegible]02	1[illegible]229	100.00	77.5[illegible]
2	5.29	78	92	113	14614	476421	388409	24.46	18.971
3	17.32	408	412	422	3184	98068	45126	2.84	2.2 4
4	17.97	425	430	436	2064	56882	25582	1.61	1.[illegible]0

Sum of corrected areas: 2084346.

Summary of Unknowns PBM Library Search and Quantitation

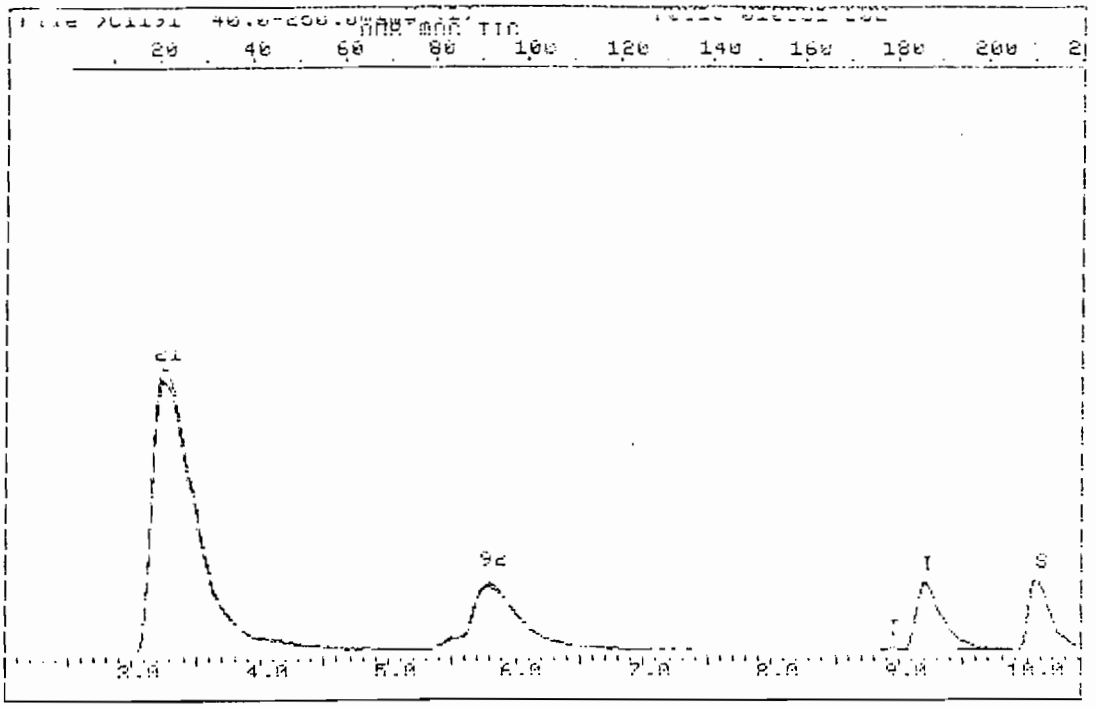
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	226[illegible]0.	9.18	7.51 - 9.91
2	50.0	457870.	10.66	9.92 - 13.41
3	50.0	651095.	16.17	13.41 - 22. 4

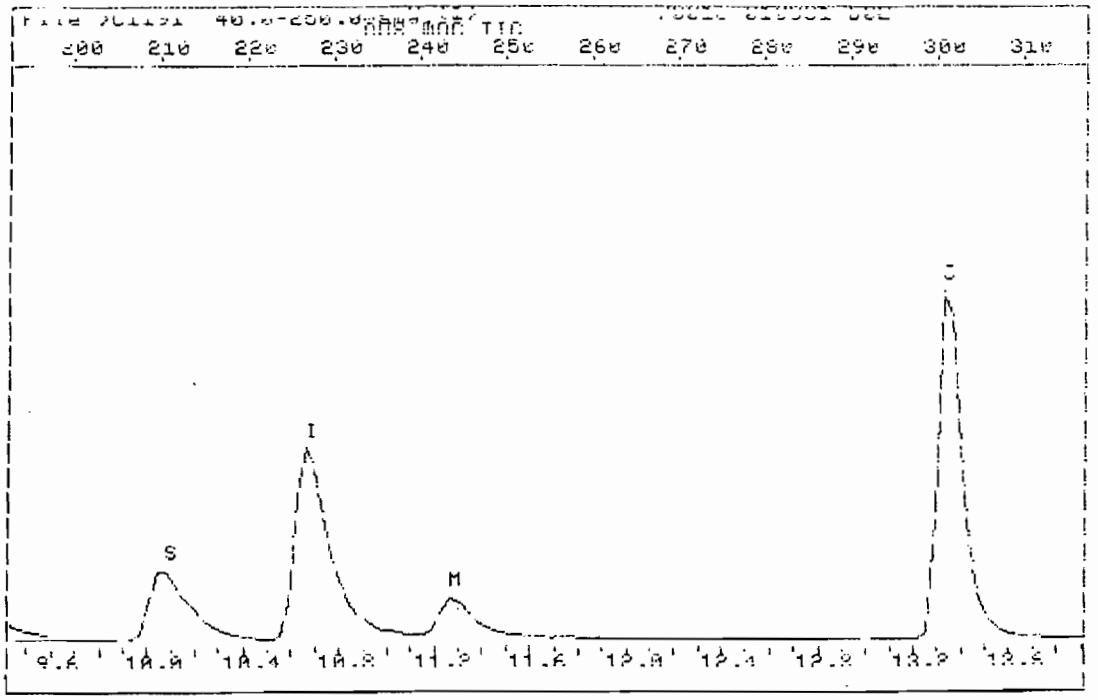
Dilution Factor = 1.00 This sample was 10000.00 g or mL

Correction Factor = 1.00

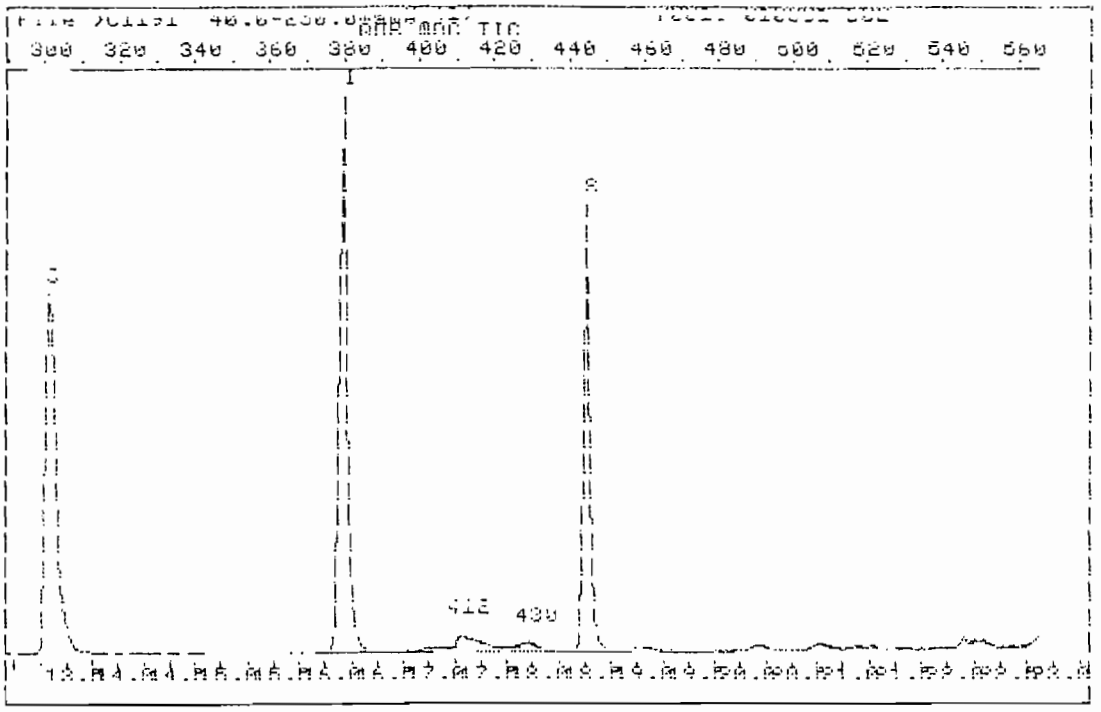
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

12:16 PM TUE., 8 MAY , 2001





Instrument ID: 700 Analyzed on: 4/09/01 12:45



Instrument ID: 7001 Analyzed on: 4/19/01 12:43

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-8(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1174
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	3.	BJ
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	4.	J
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	49.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	320.	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-8(2)

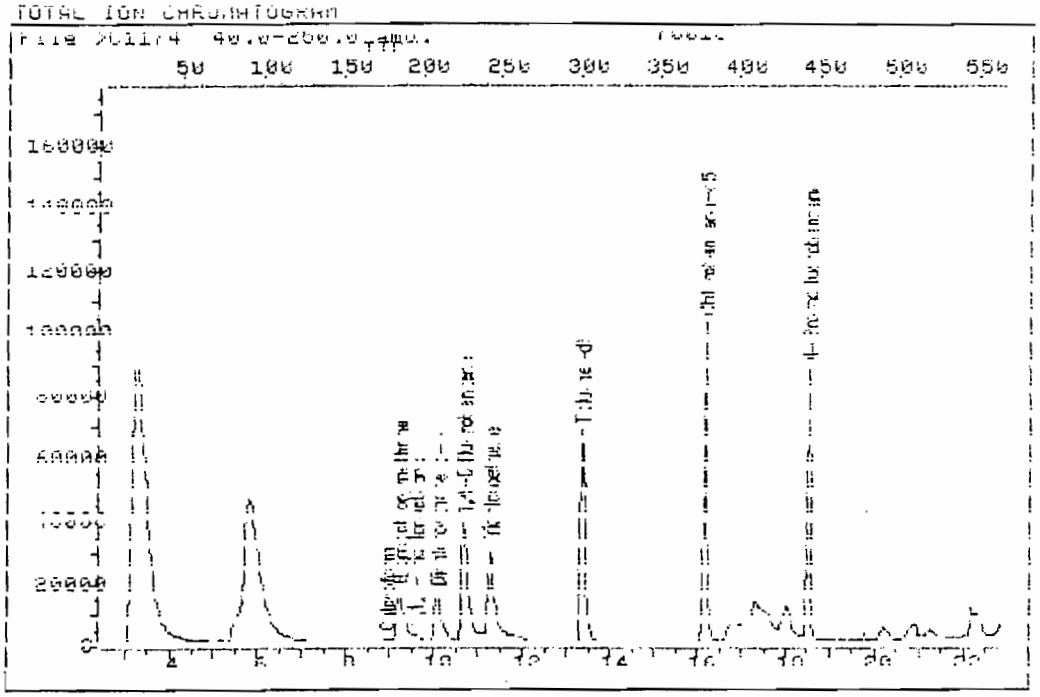
Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1174
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Oxygenated compound	17.33	16.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

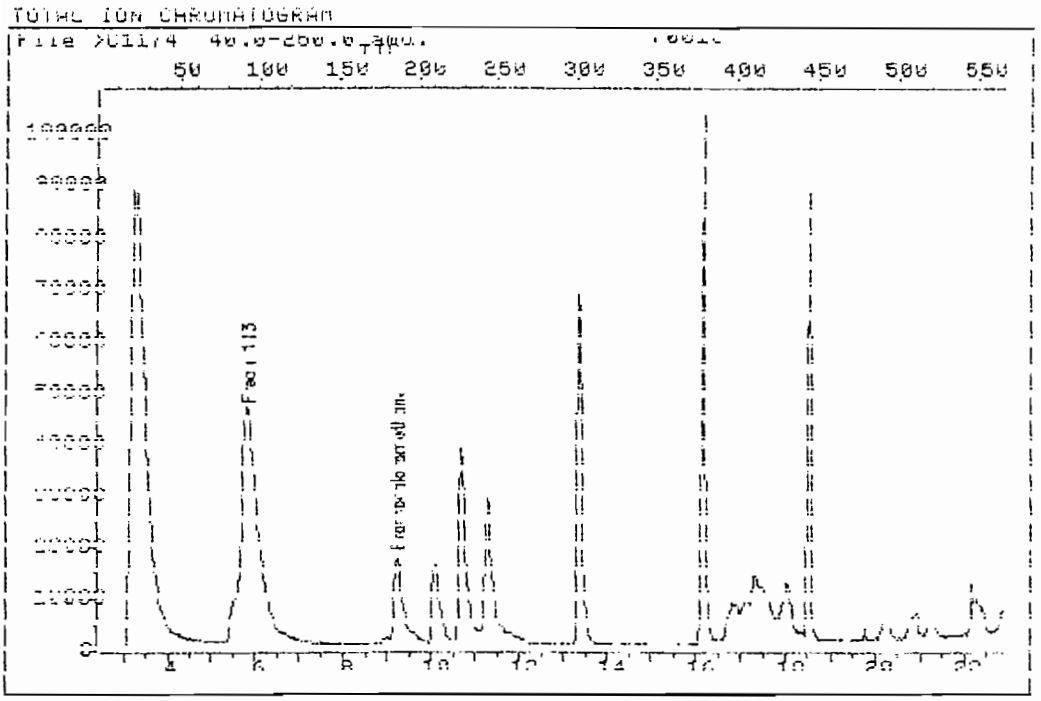
TOTAL ION CHROMATOGRAM



Data File: >C:\24::03 Quant Output File: >C:\24::QT
Name: mw-8(2)
Misc: 20010 0.0338810

Id File: ID-91C::
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Qcal Time: **-06 09:

Operator ID: MANAGER
Quant Time : 010406 21:
Injected at: **0406 20:45



Data File: >C1174::03
Name: MW-8(2)
Misc: 7001c 0.033810

Quant Output File: 'C1174::QT
Instrument ID: .001 1.

Id File: IDF113::
Title: Freon 113 ID File
Last Calibration: :

Last Qcal Time: **-06 1

Operator ID: MANAGER
Quant Time : 010423 14:
Injected at: **0406 20:45

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 2 Quant Time: 010406 21:07
Output File: ^C1174::QT Injected at: **0406 20:45
Data File: ^C1174::03 Dilution Factor: 1.0000
Name: MW-8(2)
Misc: 7001c 010330 B10

ID File: IDS91C::MT
Title: HP VOA Continuing Calibration standard
Last Calibration: 000810 08:51 Last Qcal Time: **0406 09:53

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	*Bromochloromethane	9.21	128.0	18711	50.00	ug	97
18)	Chloroform	8.93	83.0	5858	3.50	UG	82
19)	1,2-Dichloroethane-d4	10.08	65.0	25197	49.40	ug	9
22)	*1,4-Difluorobenzene	10.66	114.0	114671	50.00	UG	96
23)	1,1,1-Trichloroethane	9.58	97.0	4279	1.87	ug	7
29)	Trichloroethene	11.27	130.0	30658	48.85	UG	99
36)	*Chlorobenzene-d5	16.17	117.0	122622	50.00	ug	7
42)	Toluene d-8	13.53	98.0	108192	52.12	UG	99
48)	Bromofluorobenzene	18.52	95.0	75018	51.81	ug	4

* Compound is ISTD

QUANT REPORT Page 1

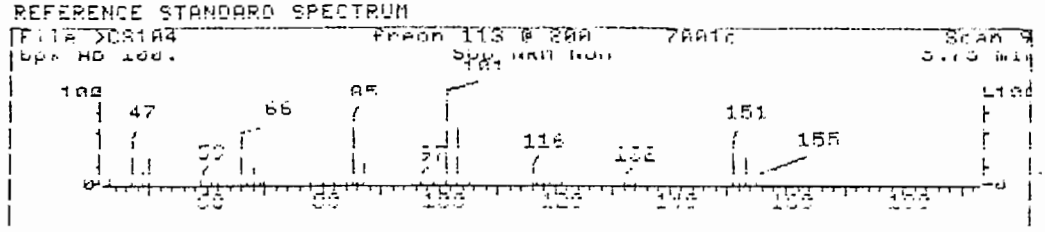
Operator ID: MANAGER Quant Rev: 7 Quant Time: 01104/23 14:11
Output File: 'C1174::QT Injected at: **0406 20:45
Data File: >C1174::03 Dilution Factor: 1.0000
Name: MW-8(2) Instrument ID: 7001 C
Misc: 7001c 010331 B10

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **0406 15:22

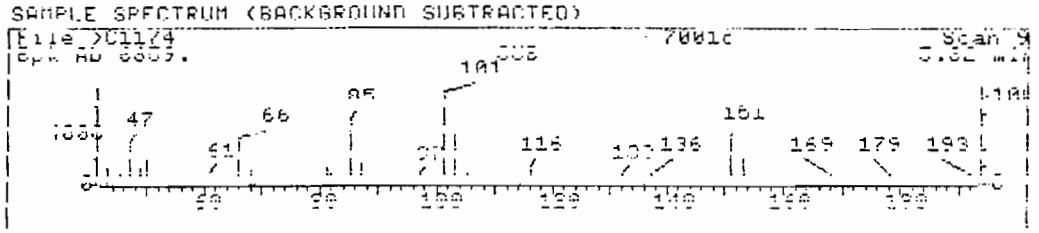
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.21	128.0	18087	50.00	UG	94
2)	Freon 113	5.82	101.0	169072	324.04	UG	97

* Compound is ISTD

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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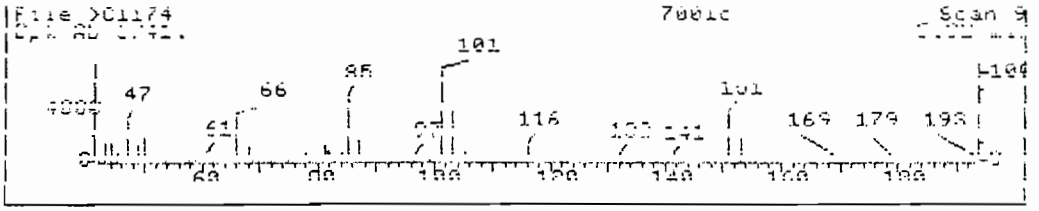
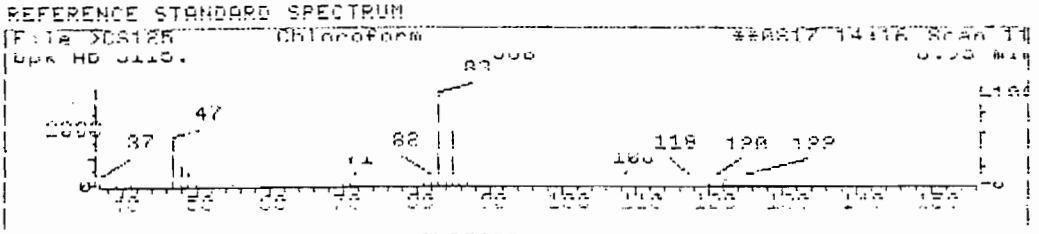


Data File: >C1174::03
Name:
Misc: 7001c
Quant Time: 010423 14:01
Injected at: **0406 20:45
Last Qcal Time: **0406 15:22

Quant Output File: 'C1174::QT
Instrument ID: 7001
Quant ID File: [DF113::MT
Last Calibration: :

Compound No : 2
Compound Name : Freon 113
Scan Number : 93
Retention Time: 5.82 min.
Quant Ion : 101.0
Area : 169072
Concentration : 32?.14
q-value : 97

REFERENCE STANDARD SPECTRUM



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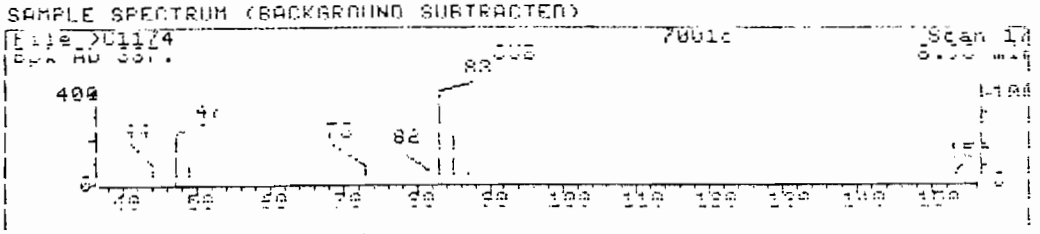
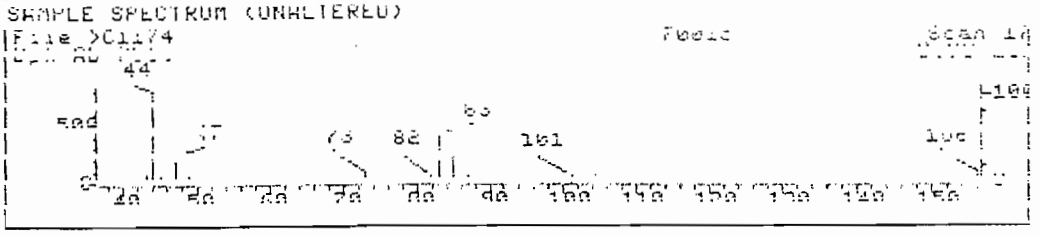


SAMPLE SPECTRUM (UNALTERED)



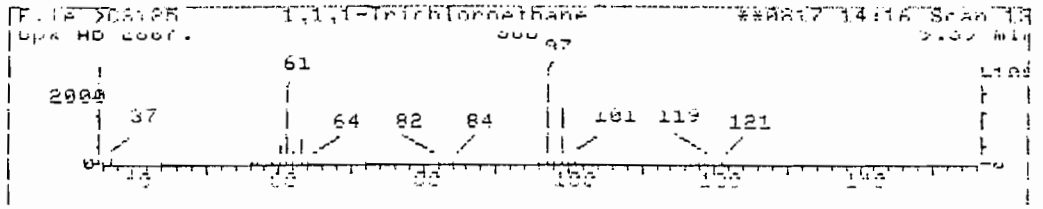
Data File: >C:\74::03
Name:
Misc: 7001c
Quant Time: 01\406 21:09
Injected at: **\406 20:45
Last Qcal Time: **\406 09:53

Quant Output File: >C:\74::Q\
Instrument ID: >\01 \.

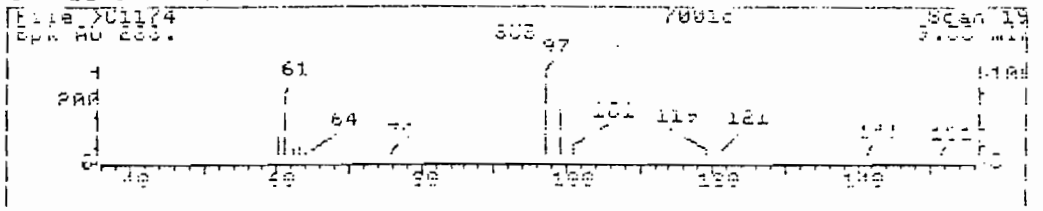
Quant ID File: [USER]C::MT
Last Calibration: 0000\0 00:0

Compound No : 18
Compound Name : Chloroform
Scan Number : 179
Retention Time: 8.93 min.
Quant Ion : 83.0
Area : 5858
Concentration : 2.50
q-value : 87

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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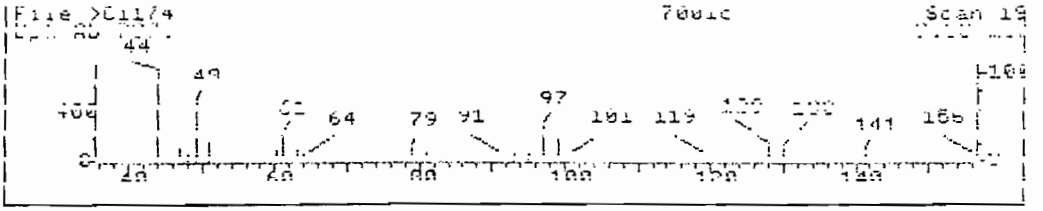
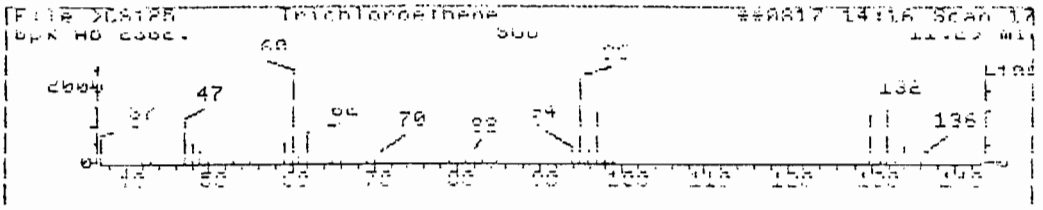


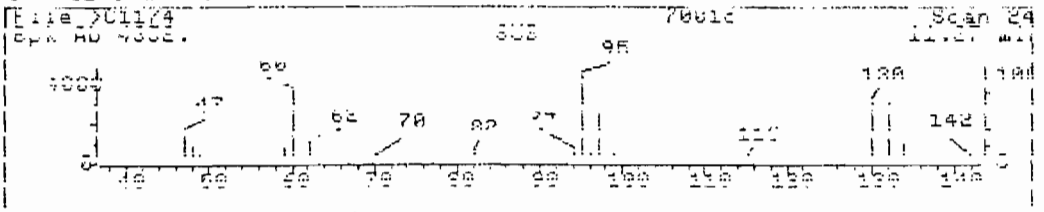
Data File: >C1174::03 Quant Output File: ^C1174::QT
Name: Instrument ID: >101
Misc: 7001c
Quant Time: 010406 21:09 Quant ID File: [DSP1C::MT
Injected at: **0406 20:45 Last Calibration: 000010 0A:>1
Last Qcal Time: **0406 09:53

Compound No : 23
Compound Name : 1,1,1-Trichloroethane
Scan Number : 197
Retention Time: 9.58 min.
Quant Ion : 97.0
Area : 4279
Concentration : 3.87
q-value : 87

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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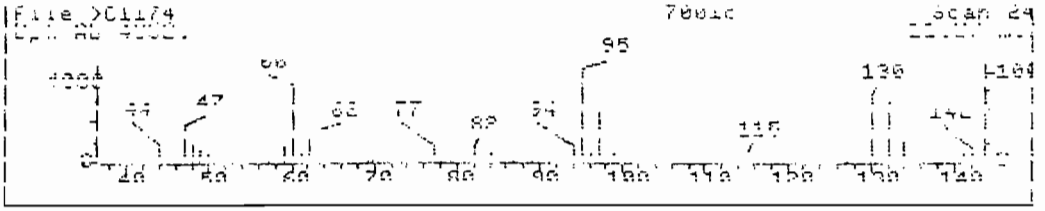


Data File: >C1174::03
Name:
Misc: 7001c
Quant Time: 011406 21:09
Injected at: **0406 20:45
Last Qcal Time: **0406 09:53

Quant Output File: >C1174::QT
Instrument ID: >A01
Quant ID File: ID5A1C::MT
Last Calibration: 000A10 0d:>1

Compound No : 29
Compound Name : Trichloroethene
Scan Number : >44
Retention Time: 11.27 min.
Quant Ion : 130.0
Area : 30658
Concentration : 46.85
q-value : 95

MS data file header from : >1.1174::1>

Sample: Operator: MANAGER SUPER USR. 4/06/01 2:1->
Misc : 2001c
Sys. #: 1 MS model: 70 SW/HW rev.: LF Rack #: 0 Equip ID: 2001 C
Method file: METH03 Tuning file: MIY003 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp.: 0

Chromatographic temperatures :	45.	250.	250.	0.	0.
Chromatographic times, min. :	3.0	30.0	30.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0

>1.1174 2001c
40.01 250.0 CLP 1IL
Up slope: .2000 Area Reject: 24915. Max Peaks: 10 Hinoh: -1 Valley 100 %
Down slope: 0.0000 Results File IC1174 Sorted By Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	3.27	12	22	62	89685	2245825	2284412	100.00	52.2[illegible]
2	5.79	79	92	130	45491	1425032	1292209	57.12	29.854
3	11.81	257	259	277	2764	87421	98515	1.25	.9[illegible]
4	16.82	394	398	412	7251	124802	114411	4.74	2.625
5	17.93	409	412	425	8796	258918	165265	7.51	3.7[illegible]
6	18.01	426	431	442	10950	234806	166491	7.55	3.847
7	20.21	482	492	499	3758	103827	47198	2.14	1.1[illegible]
8	20.90	502	511	515	4649	128987	64389	2.92	1.526
9	21.26	516	521	530	3006	113436	37870*	1.71	.8[illegible]
10	22.16	543	546	557	9308	219326	130459	5.92	3.009

Sum of corrected areas: 4217850.

Summary of Unknowns PBM Library Search and Quantitation

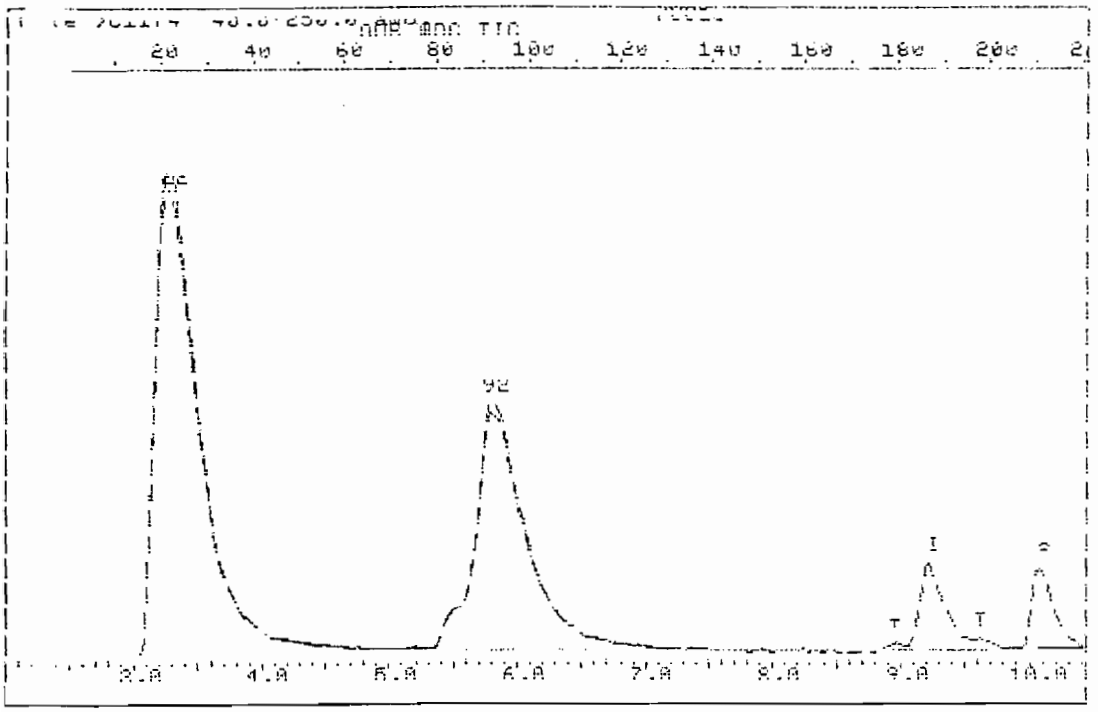
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	249154.	9.21	2.51 - 9.94
2	50.0	458626.	10.66	9.94 - 15.42
3	50.0	531527.	16.17	15.42 - 22.88

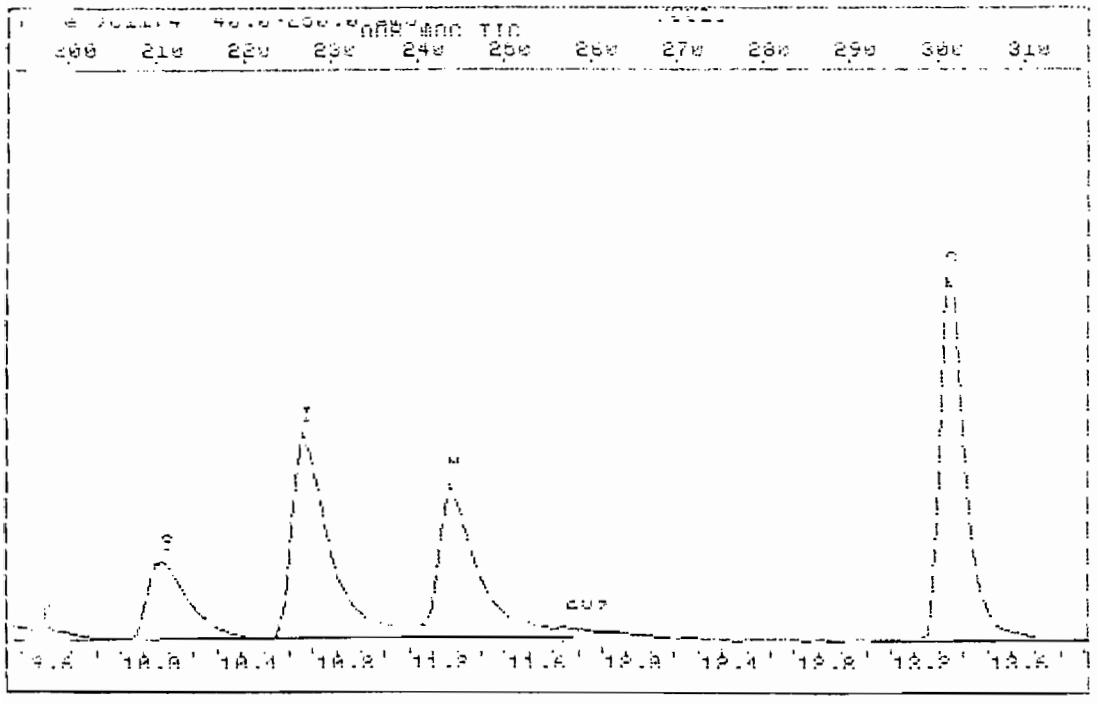
Dilution Factor = 1.00 This sample was 1000.00 g or ml

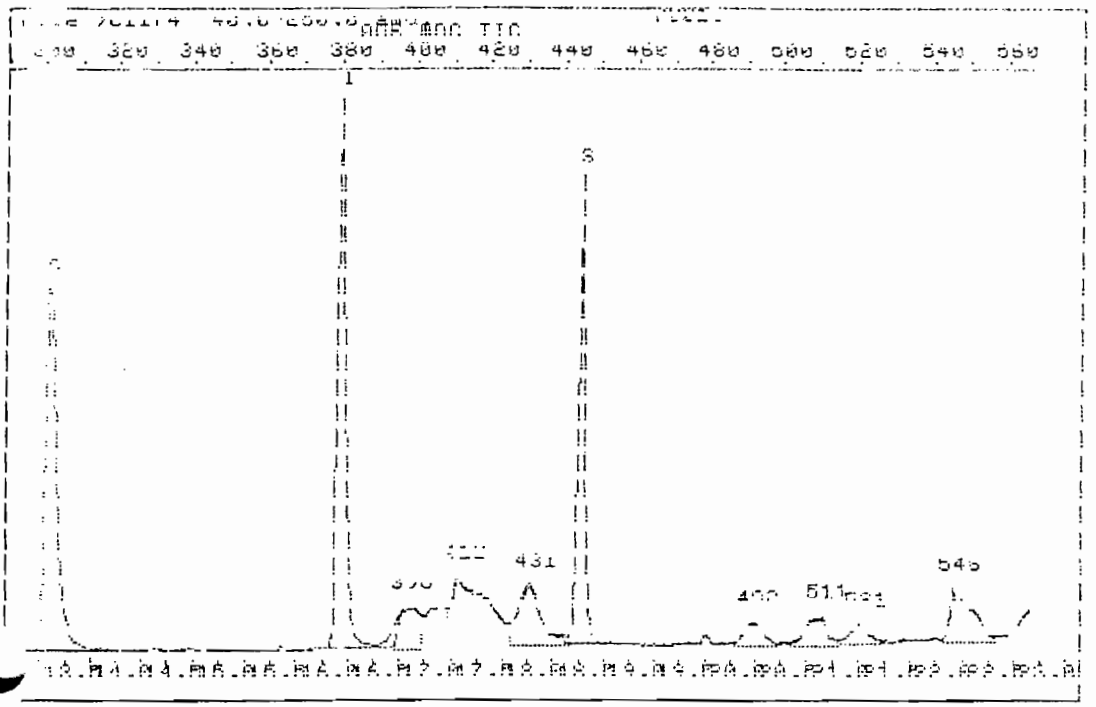
Correction Factor = 1.00

$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

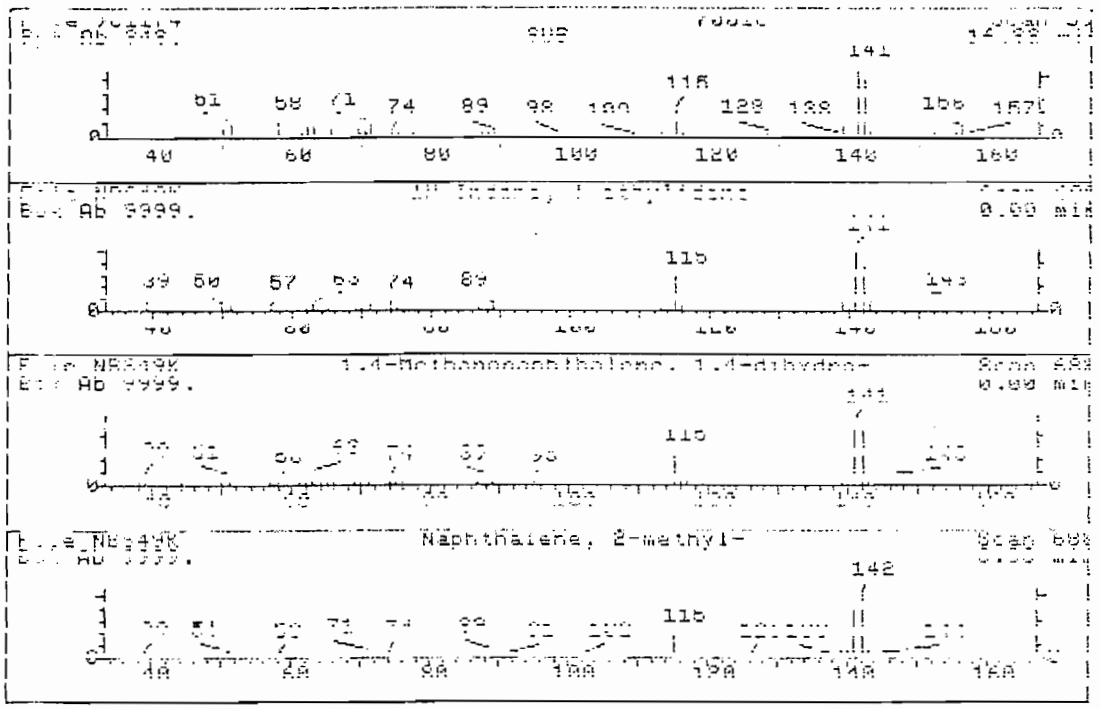
7:07 PM MON., 23 APR., 2001







Instrument ID: 7111 Analyzed on: 4/16/11 21:45



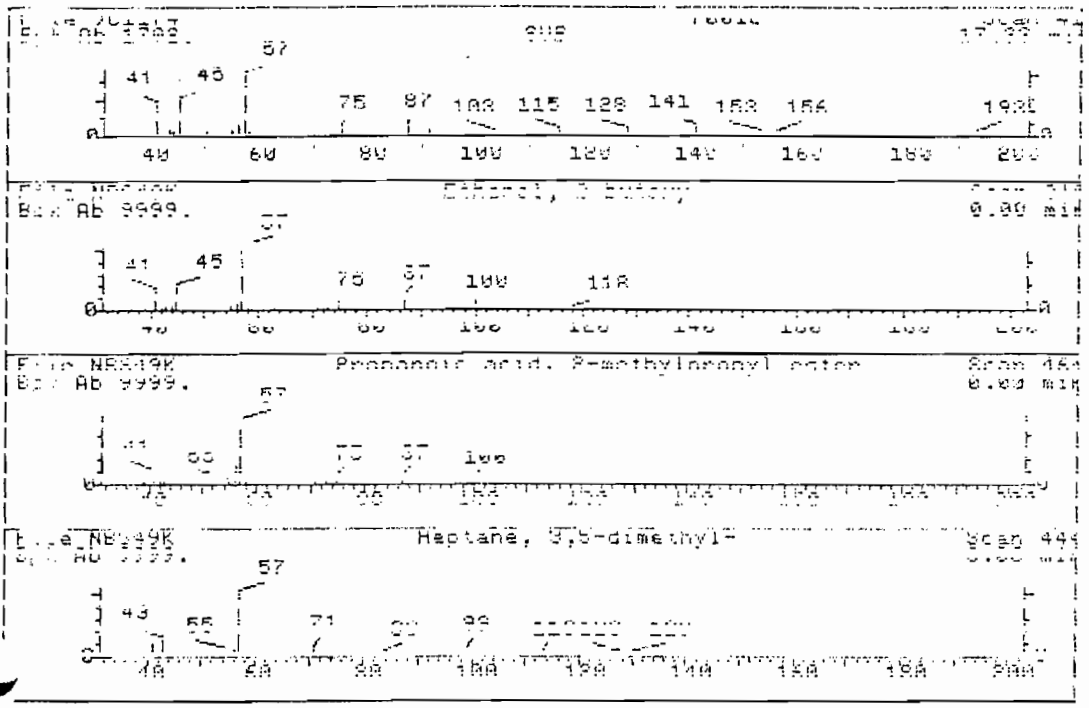
methyl naphth. Clover

Instrument ID: 7001 Analyzed on: 4/16/01 21:45
Result 5 in PBM results file: 11174
Retention Time: 16.82 Area: 1144111 tentative conc: 10.00
The unknown area is 19.04% of the nearest internal standard

1. 1H-Indene, 1-ethylidene- 142 C11H10
2. 1,4-Methanonaphthalene, 1,4-dihydro- 142 C11H10
3. Naphthalene, 2-methyl- 142 C11H10
4. Naphthalene, 1-methyl- 142 C11H10
5. BENZOCYCLOHEPTATRIENE 142 C11H10
6. 1H-Indole-5-carbonitrile 142 C9H6N2

Sample file: >C1174 Spectrum #: 398
Search speed: 1 Tuning option: N No. of ion ranges searched: 7

	Prob.	CAS #	CON #	ROOT	K	DK	#PEAKS MISS	%	CON	CHRIO
1.	95*	2471852	18082	NBS49K	81	19	0	0	88	10	68
2.	79*	4453911	18081	NBS49K	56	44	2	0	96	10	48
3.	63*	91576	18084	NBS49K	52	46	1	0	90	20	50
4.	63*	90120	18080	NBS49K	52	48	1	0	92	20	30
5.	32*	2644095	18083	NBS49K	53	55	2	0	61	45	12
6.	30*	15861242	18076	NBS49K	39	55	2	0	92	45	8



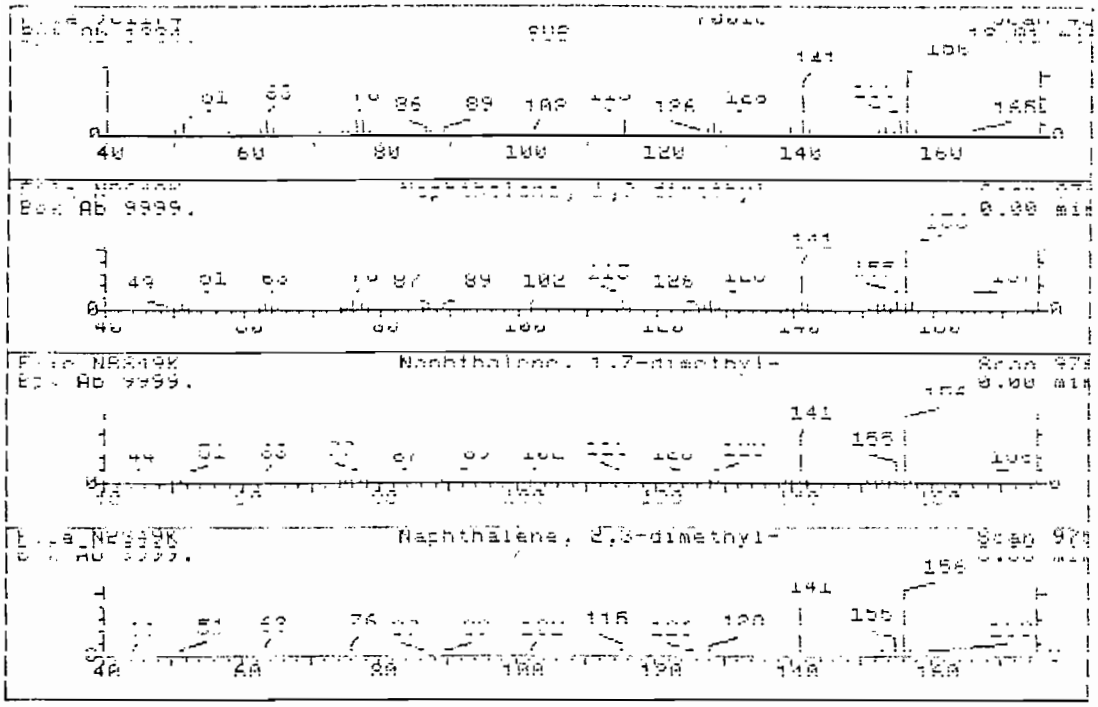
oxygenated

Instrument ID: 2IIII Analyzed on: 4/06/01 2II:45
Result 4 in PBM results file: II.J1/4
Rerention Time: 17.33 Area: 165765 Tentative Conn: 16.00
The unknown area is 21.89% of the nearest internal standard

1. Ethanol, 2-butoxy- IIH I6H14I2
2. Propanoic acid, 2-methylpropyl ester 1II I2H1[illegible]
3. Heptane, 3,5-dimethyl- 12H I9H2I
4. Ethanedioic acid, dibutyl ester 2II2 I1ÖH1R..4
5. n-Butyl ether 13II C8H18O

Sample file: >C11/4 Spectrum #: 412
Search speed: 1 Tilting option: N No. of ion ranges searched: 4R

	Prob.	CAS #	CON #	RUN	K	UK	#FLG	TILT	%	MIN	I	R	J
1.	37	111762	7269	NHS49K	43	44	2	0	86	30	14	14	
2.	25	5411421	1762	NBS49K	38	39	2	0	1000	42	8	[illegible]	
3.	25*	926829	1259	NHS49K	26	51	3	0	1000	47	7	13	
4.	25	2050614	1295	NBS49K	43	16	1	0	68	47	7	[illegible]	
5.	11*	142961	7315	NHS49K	29	51	2	0	69	69	7	14	

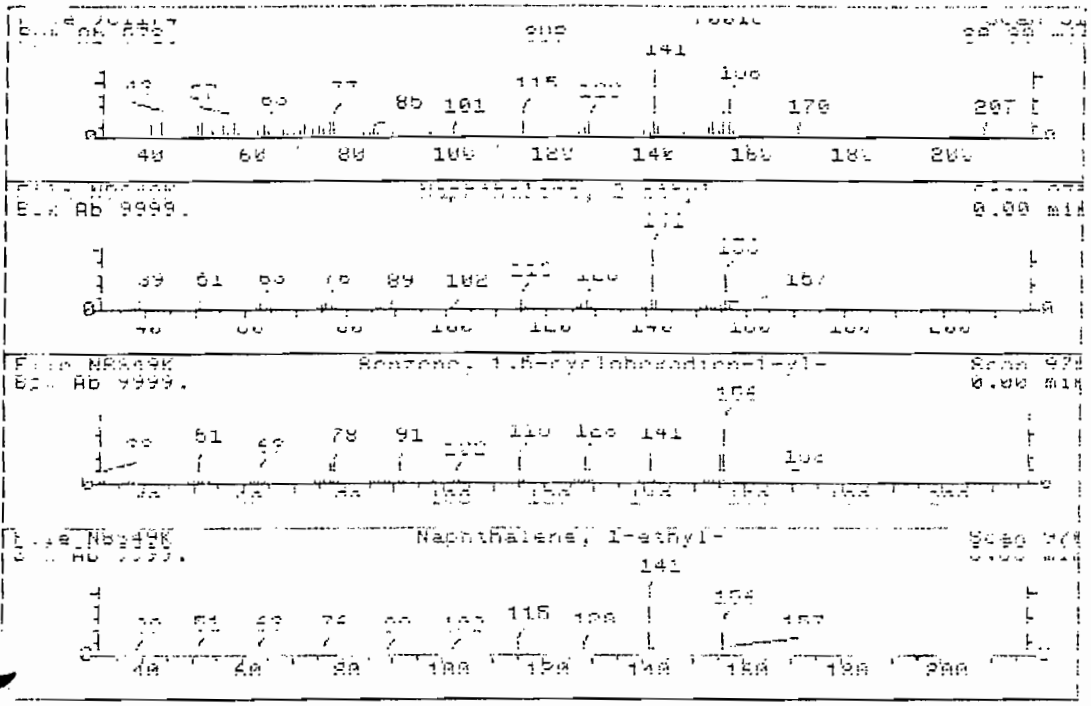


Instrument ID: 7001 Analyzed on: 4/08/91 20:49
Result 5 in PBM results file: 10174
Retention Time: 18.01 Area: 166491 Tentative Conc: 10.000
The unknown area is 31.92% of the nearest internal standard

1. Naphthalene, 1,3-dimethyl- 156 C12H12
2. Naphthalene, 1,7-dimethyl- 156 C12H12
3. Naphthalene, 2,3-dimethyl- 156 C12H12
4. Naphthalene, 1,6-dimethyl- 156 C12H12
5. Naphthalene, 1,4-dimethyl- 156 C12H12
6. Naphthalene, 1,8-dimethyl- 156 C12H12

Sample file: >C1174 Spectrum #: 421
Search speed: 1 Tilting option: N No. of ion ranges searched: 14

	Prob.	CAS #	CON #	NAME	K	DK	#HITS	TIE	%	CON	C I R IO
1.	89*	575417	20519	NBS49K	91	16	1	0	100	7	62
2.	89*	575371	20518	NBS49K	72	36	1	0	100	12	51
3.	89*	581418	20512	NBS49K	71	35	1	0	100	12	51
4.	89*	575439	20522	NBS49K	72	36	1	0	100	12	51
5.	79*	571584	20520	NBS49K	66	42	1	0	94	14	43
6.	76*	569415	20515	NBS49K	73	37	2	0	100	11	48

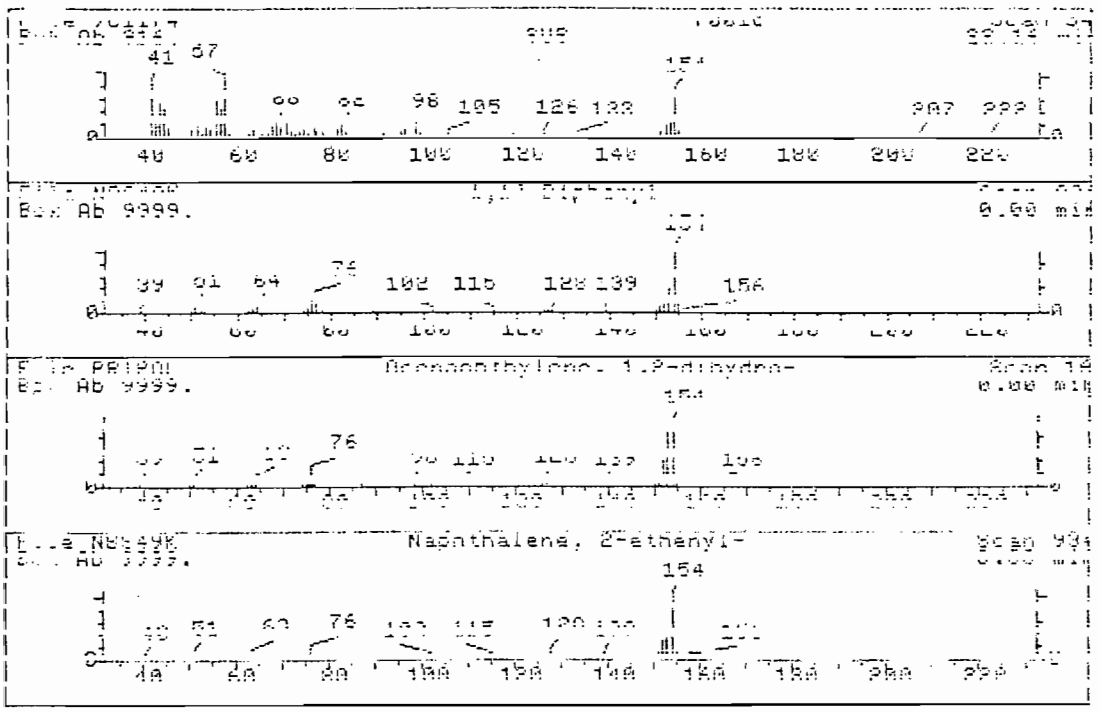


Instrument ID: 7111 Analyzed on: 4/16/01 21:45
Result 6 in PAH results file: LC1174
Retention Time: 21.90 Area: 64385 Tentative Conc: 6.111
The unknown area is 12.11% of the nearest internal standard

1. Naphthalene, 2-ethyl- 156 C12H12
2. Benzene, 1,3-cyclohexadien-1-yl- 106 C12H1
3. Naphthalene, 1-ethyl- 156 C12H12
4. Benzene, 1,3-cyclohexadien-1-yl- 106 C12H1
5. Benzene, (1,4-cyclohexadien-1-yl)- 156 C12H12
6. Benzene, 2,4-cyclohexadien-1-yl- 106 C12H1

Sample file: >C1174 Spectrum #: 511
Search speed: 1 Tuning option: N No. of ion ranges searched: 3

	Prob.	CAS #	CON #	ROOT	K	OK	#Hits	Tilt	%	CON	C	I	R	IO
1.	45*	939275	20518	NBS49K	51	55	1	11	100	39	17		4	
2.	41*	15619548	20510	NBS49K	59	70	2	0	61	44	14		36	
3.	41*	1127760	20516	NBS49K	59	60	1	0	100	41	14		4	
4.	25*	15619326	20525	NBS49K	50	79	3	0	61	46	2		14	
5.	15*	13703521	20517	NBS49K	54	85	2	11	61	57	3		4	
6.	15*	21473052	20511	NBS49K	29	81	2	11	42	61	3		14	



Instrument ID: 7000 Analyzed on: 4/06/11 20:49
Result 7 in PBM results file: 11174
Retention Time: 22.16 Area: 130459 Tentative Conc: 12.00
The unknown area is 24.54% of the nearest internal standard

1.	1,1'-Biphenyl	154 C12H10
2.	Acenaphthylene, 1,2-dihydro-	154 C12H10
3.	Naphthalene, 2-ethenyl-	154 C12H10
4.	Acenaphthene (BCL)	154 C12H10
5.	Acenaphthylene, 1,2-dihydro-	154 C12H10
6.	.DELTA.2-Tetrazaboroline, 1,4,5-triethyl-	154 C6H15N4

Sample file: >C1174 Spectrum #: 546
Search speed: 1 Tuning option: N No. of ion ranges searched: 2

	Prob.	CAS #	CON #	NAME	K	DK	#PEAKS	TUNE	%	CON	CONF	DIFF
1.	59*	92524	20123	NBS49K	60	40	1	0	56	40	21	
2.	56*	167	259	PBIPDL	66	42	1	0	52	48	14	
3.	55*	827543	20176	NBS49K	67	54	2	0	59	40	19	-8
4.	46*	83329	20175	NBS49K	61	45	1	0	54	47	15	56
5.	30*	170	262	PBIPDL	59	60	1	0	56	47	10	1
6.	30*	21534047	20199	NBS49K	28	86	3	0	75	35	12	15

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8(2) DL

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(2) DL
Sample wt/vol: 2.500 (g/mL) ML Lab File ID: C1179
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/07/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	20.	U
74-83-9	Bromomethane	20.	U
75-01-4	Vinyl Chloride	20.	U
75-00-3	Chloroethane	20.	U
75-09-2	Methylene Chloride	10.	U
67-64-1	Acetone	20.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	1,2-Dichloroethene-trans	10.	U
67-66-3	Chloroform	6.	BJ
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	20.	U
71-55-6	1,1,1-Trichloroethane	4.	J
56-23-5	Carbon Tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	56.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
10061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	20.	U
591-78-6	2-Hexanone	20.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
156-59-2	1,2-Dichloroethene-cis	10.	U
106-42-3	m,p-Xylenes	10.	U
95-47-6	o-Xylene	10.	U
76-13-1	Freon 113	410.	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-8(2) DL

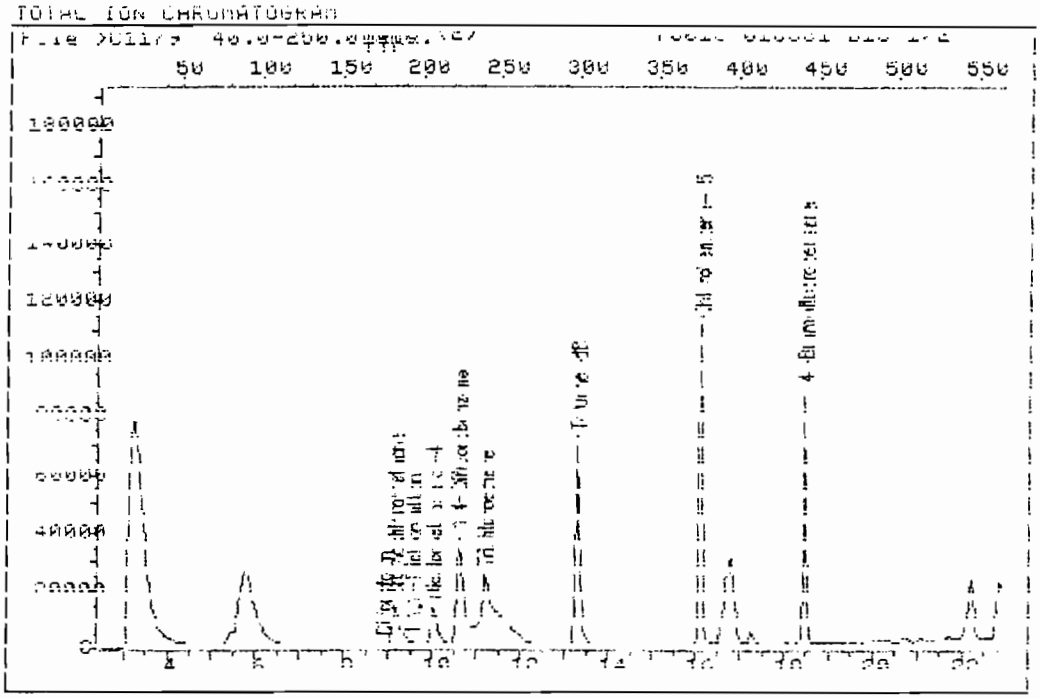
Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(2) DL
Sample wt/vol: 2.500 (g/mL) ML Lab File ID: C1179
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/07/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

TOTAL ION CHROMATOGRAM

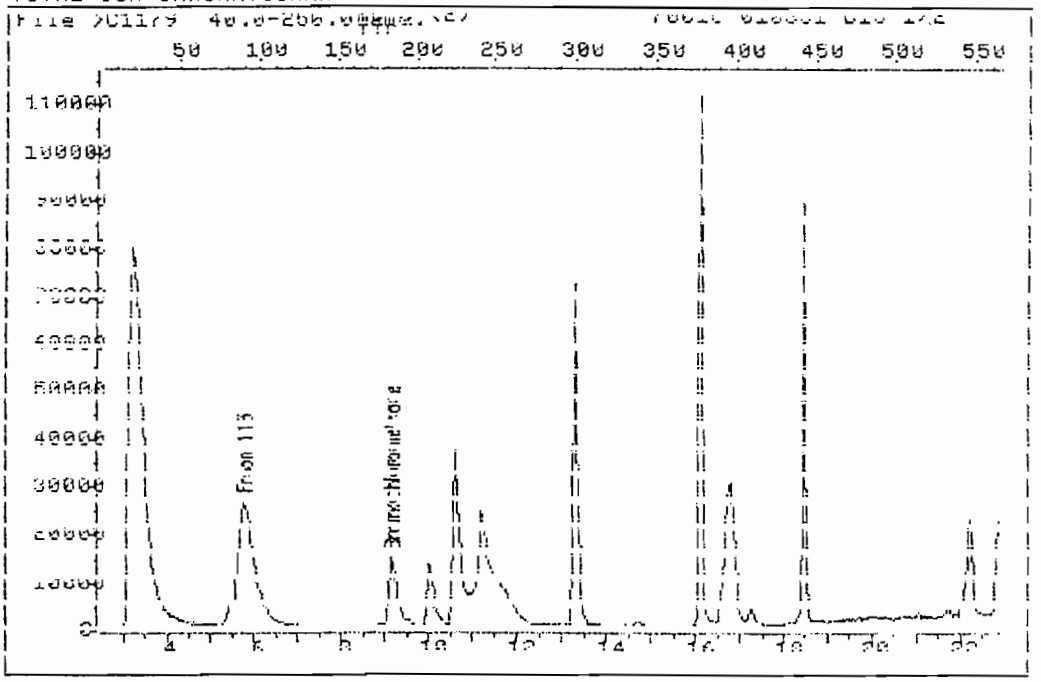


Data File: >C1129::03 Quant Output File: ^C1129::QT
Name: mw-8 (2) Instrument ID: [illegible]
Misc: 700lc 010331 b10 1/2

Id File: 10591D::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Qcal Time: **[illegible]

Operator ID: MANAGER
Quant Time : 010407 14:[illegible]
Injected at: **0407 14:11

TOTAL ION CHROMATOGRAM



Data File: >C1179::03
Name: mw-8 (2)
Misc: 7001c 010331 b10 1/2

Quant Output File: 'C1179::QT
Instrument ID: >H01 L

Id File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: :

Last Qcal Time: **-07 11:-4

Operator ID: MANAGER
Quant Time : 010423 11:
Injected at: **0407 14:11

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 2 Quant Time: 01/04/07 14:14
Output File: ^C1179::QT Injected at: **/04/07 14:11
Data File: >C1179::03 Dilution Factor: 1.000000
Name: mw-8 (2) Instrument ID: 7001 C
Misc: 7001c 010531 610 1/2

ID File: IDS91C::MT
Title: HP VOA Continuing Calibration Standa
Last Calibration: 000810 08:51 Last Quant Time: **/04/07 11:44

	Compound	R.T.	Q ion	Area	Conc	Units	%
1)	*Bromochloromethane	9.14	128.0	15060	50.000	ug	
18)	Chloroform	8.89	83.0	5951	2.92	ug	83
19)	1,2-Dichloroethane-d4	10.01	65.0	61654	49.11	ug	
22)	*1,4-Difluorobenzene	10.58	114.0	116459	50.000	ug	99
23)	1,1,1-Trichloroethane	9.54	97.0	2788	2.89	ug	
24)	Trichloroethene	11.20	130.0	12657	22.72	ug	92
26)	*Chlorobenzene-d5	16.10	117.0	124791	50.000	ug	
42)	Toluene d-8	15.29	98.0	162292	48.81	ug	89
48)	Bromofluorobenzene	18.45	95.0	74747	50.57	ug	

* Compound is ISTD

QUANT REPORT Page 1

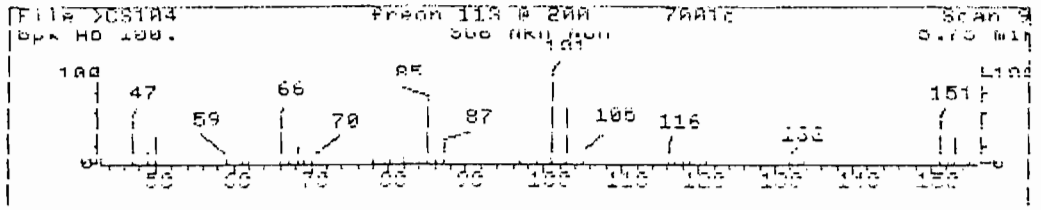
Operator ID: MANAGER Quant Rev: 7 Quant Time: 010473 1:?n
Output File: 'C1179::QT Injected at: **0407 14:11
Data File: >C1179::D3 Dilution Factor: 1.000000
Name: mw-8 (2) Instrument ID: 7001 C
Misc: 7001c 010331 b10 1/2

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **0407 11:44

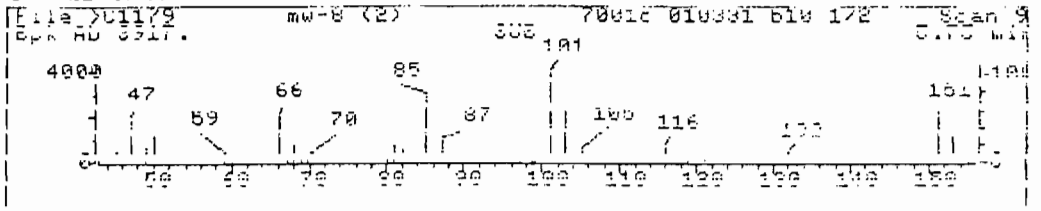
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.14	128.0	14808	50.000	ug	94
2)	Freon 113	5.75	101.0	97373	214.09	UG	95

* Compound is ISTD

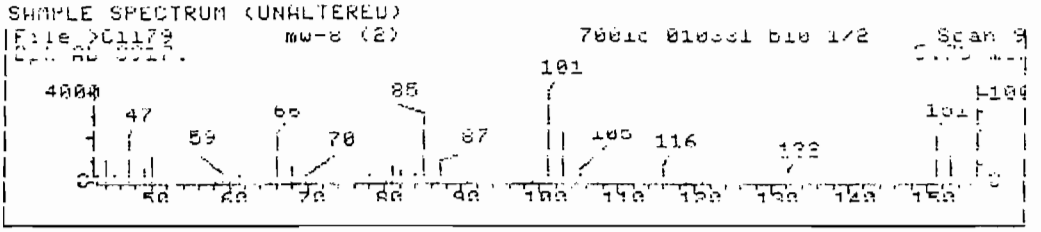
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

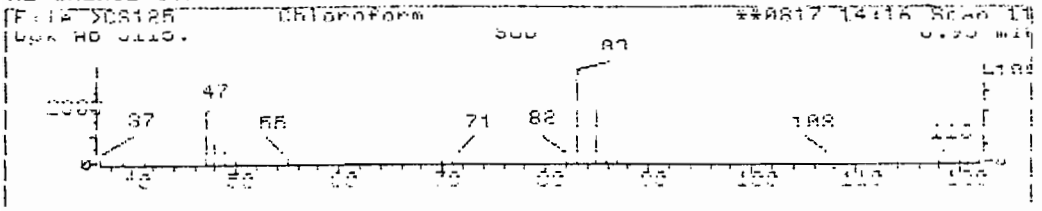


Data File: >C1179::03
Name: mw-8 (2)
Misc: 7001c 010331 b10 1/2
Quant Time: 010423 11:56
Injected at: **0407 14:11
Last Qcal Time: **0407 11:44

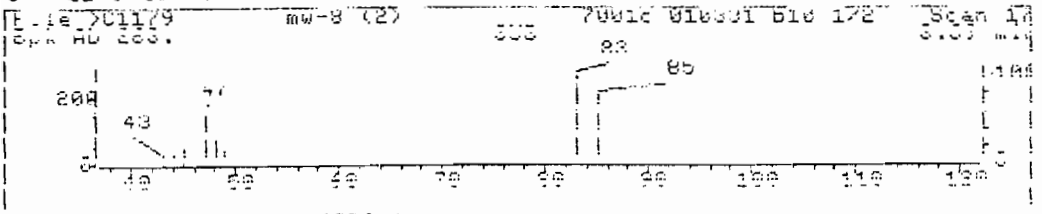
Quant Output File: >C1179::QT
Instrument ID: >001
Quant ID File: >F113::IF
Last Calibration:

Compound No : 2
Compound Name : Freon 113
Scan Number : 91
Retention Time: 5.75 min.
Quant Ion : 101.0
Area : 9732
Concentration : 204.09 UG
q-value : 95

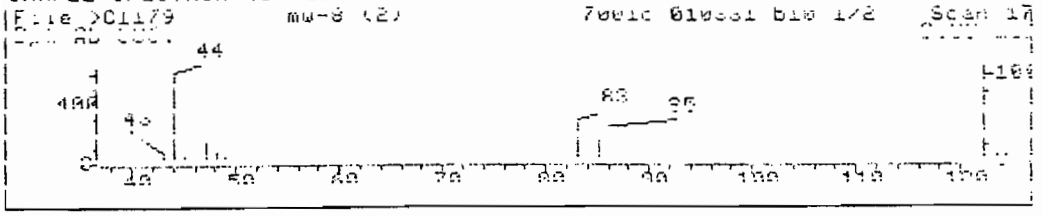
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

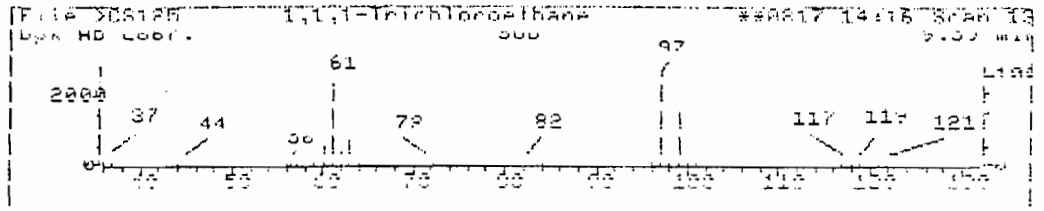


Data File: >C1179::03
Name: mw-8 (2)
Misc: 700ic 010331 b10 1/2
Quant Time: 010407 14:54
Injected at: **0407 14:11
Last Qcal Time: **0407 11:44

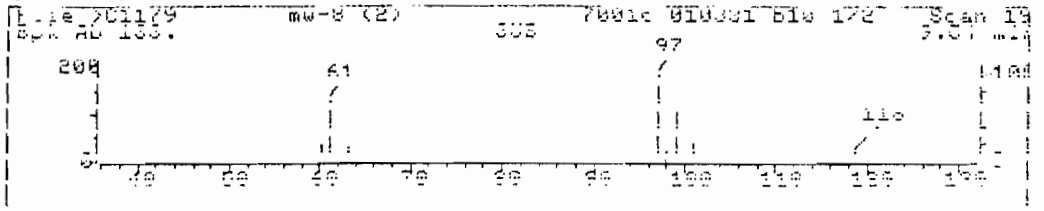
Quant Output File: >C1179::QT
Instrument ID: >301
Quant ID File: [...910.::01
Last Calibration: 010410 08:51

Compound No : 18
Compound Name : Chloroform
Scan Number : 178
Retention Time: 8.89 min.
Quant Ion : 83.0
Area : 39[illegible]
Concentration : 2.92 UG
q-value : 83

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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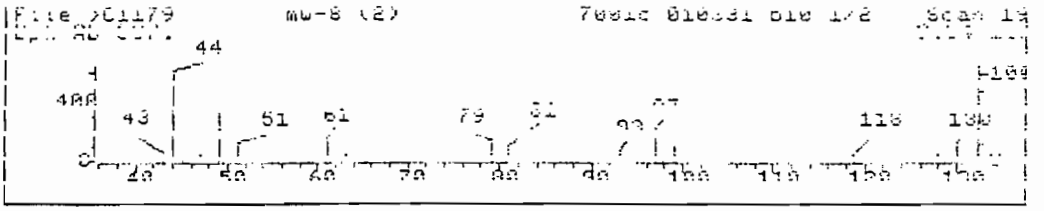
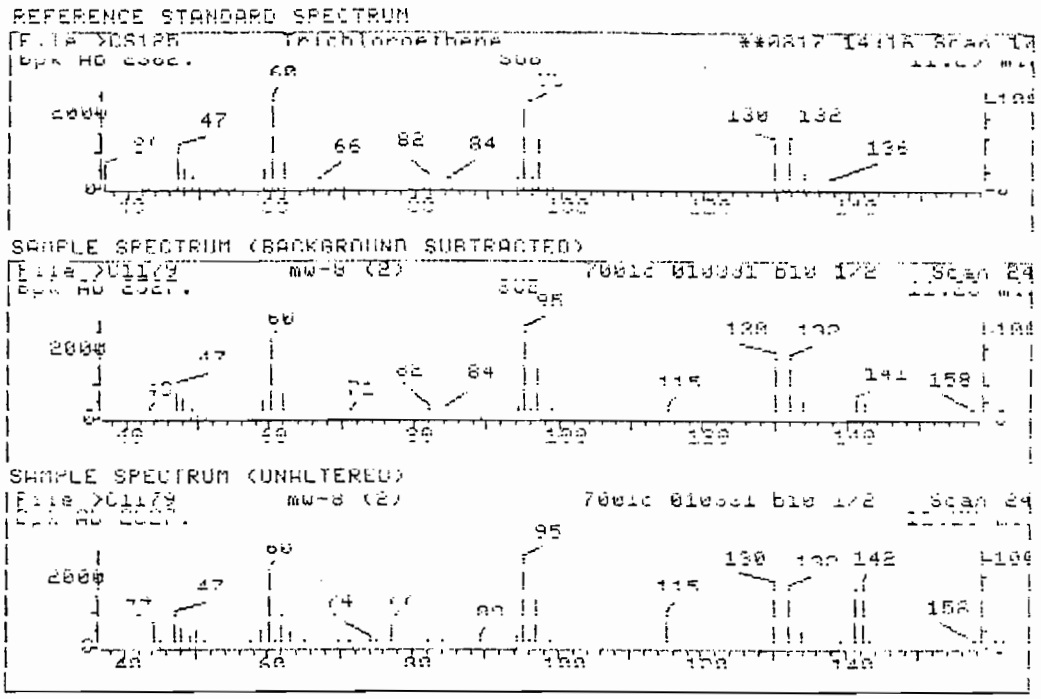


Data File: >C1179::03 Quant Output File: ^C1179::QT
Name: mw-8 (2) Instrument ID: >001 1.
Misc: 7001c 010331 b10 1/2
Quant Time: 010407 14:54 Quant ID File: 10591C::01
Injected at: **0407 14:11 Last Calibration: 000410 08:51
Last Qcal Time: **0407 11:44

Compound No : 23
Compound Name : 1,1,1-Trichloroethane
Scan Number : 196
Retention Time: 9.54 min.
Quant Ion : 97.0
Area : 22nn
Concentration : 2.09 UG
q-Value : 83



Data File: >C1179::03
Name: MW-8 (2)
Misc: 7001c 010331 b10 1/2
Quant Time: 010407 14:54
Injected at: **0407 14:11
Last Qcal Time: **0407 11:44

Quant Output File: ^C1179::Q1
Instrument ID: .001 1.
Quant ID File: [...]910.::1
Last Calibration: 00MAR01 08:21

Compound No : 29
Compound Name : Trichloroethene
Scan Number : 242
Retention Time: 11.20 min.
Quant Ion : 130.0
Area : 1763
Concentration : 27.77 UG
q-value : 92

MS data file header from : >C1179::D3

Sample: mw-8 (2) Operator: MANAGER SUPER GRP. 4/0 01 14: 1
Misc : 7001c 010331 b10 1/2
Sys. #: 1 MS model: 70 SW/HW rev.: 1.F Acq # : 0 Comp ID: 7001 ::
Method file: MEIH03 Tuning file: MT9003 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	40.	250.	230.	0.	0.
Chromatographic times, min. :	3.0	35.0	35.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0

>C1179 mw-8 (2) /7001c 010331 b10 1/2
40.01 250.0 CLP TIC
Unslope: .2000 Area Reject: 20554. Max Peaks: 6 Bunch: -1 Valley >100 %
Unslope: 0.0000 Results File IC1179 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	3.23	13	21	57	80117	1985750	1953947	100.00	55.84
2	5.75	76	91	150	268117	852041	729552	37.34	20.849
3	11.70	254	256	279	8178	197490	137859	7.04	3.937
4	16.79	391	397	416	318139	427016	449144	22.67	12.658
5	17.26	406	410	421	4965	84795	41655*	2.13	1.191
6	22.20	540	542	552	20028	316240	194302	9.94	5.551

Sum of corrected areas: 3500184.

Summary of Unknowns PBM Library Search and Quantitation

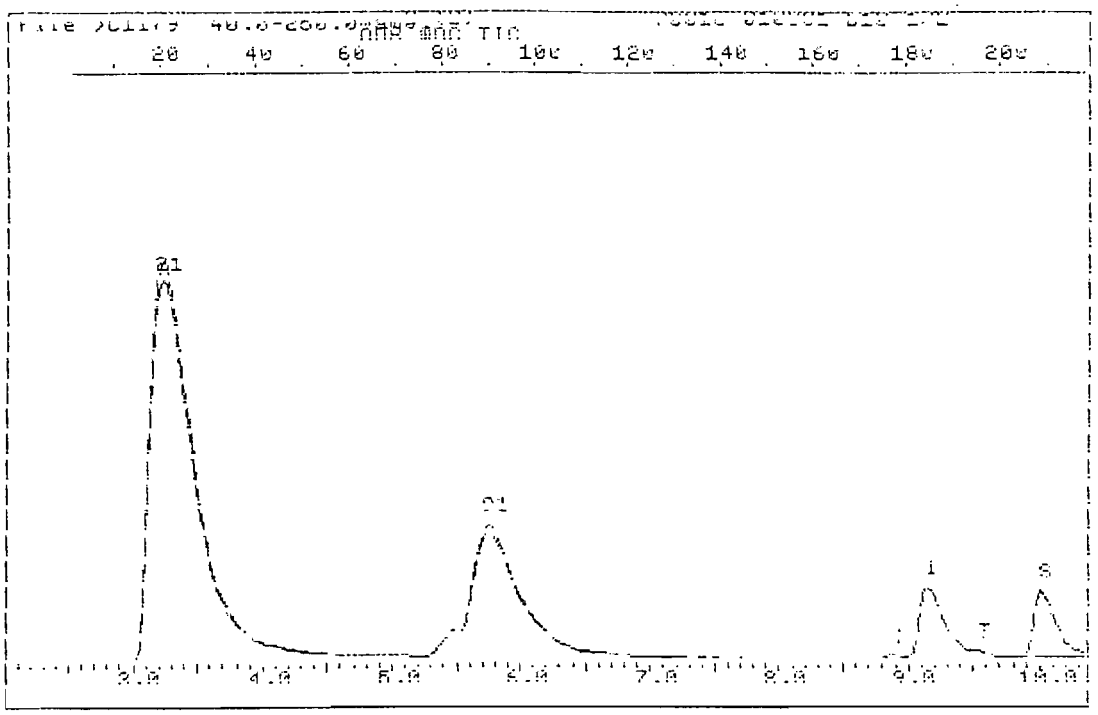
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	205538.	9.14	2.51 - 9.86
2	50.0	437892.	10.58	9.86 - 19.74
3	50.0	562519.	16.10	13.34 - 22.88

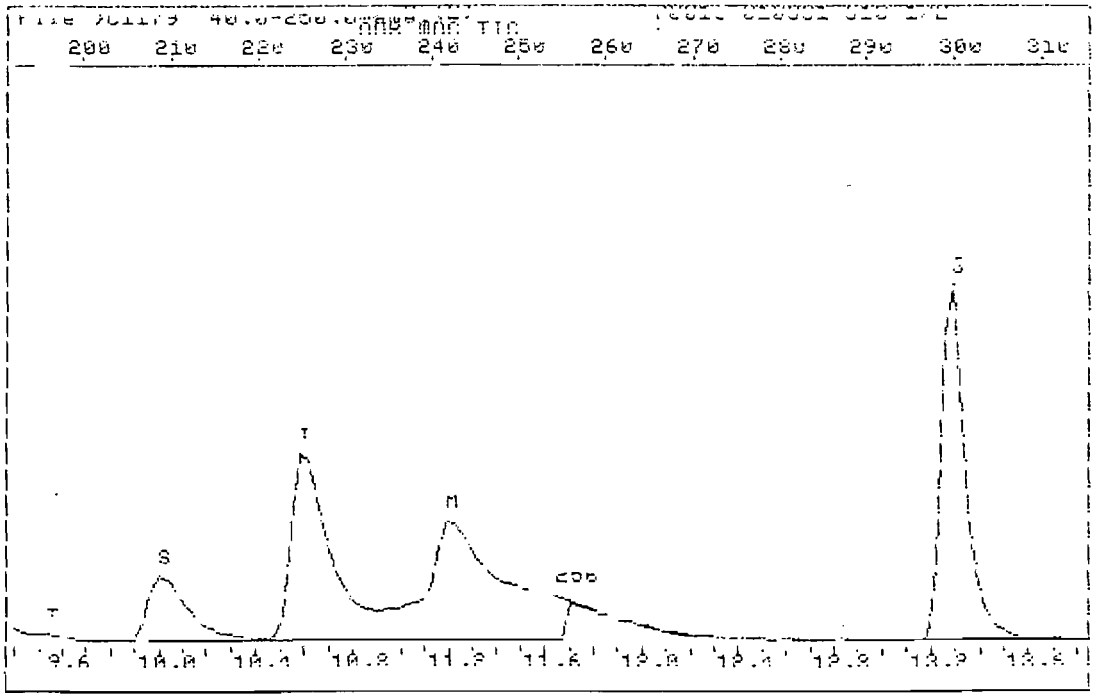
Dilution Factor = 1.00 This sample was 1000.00 g or ml

Correction Factor = 1.00

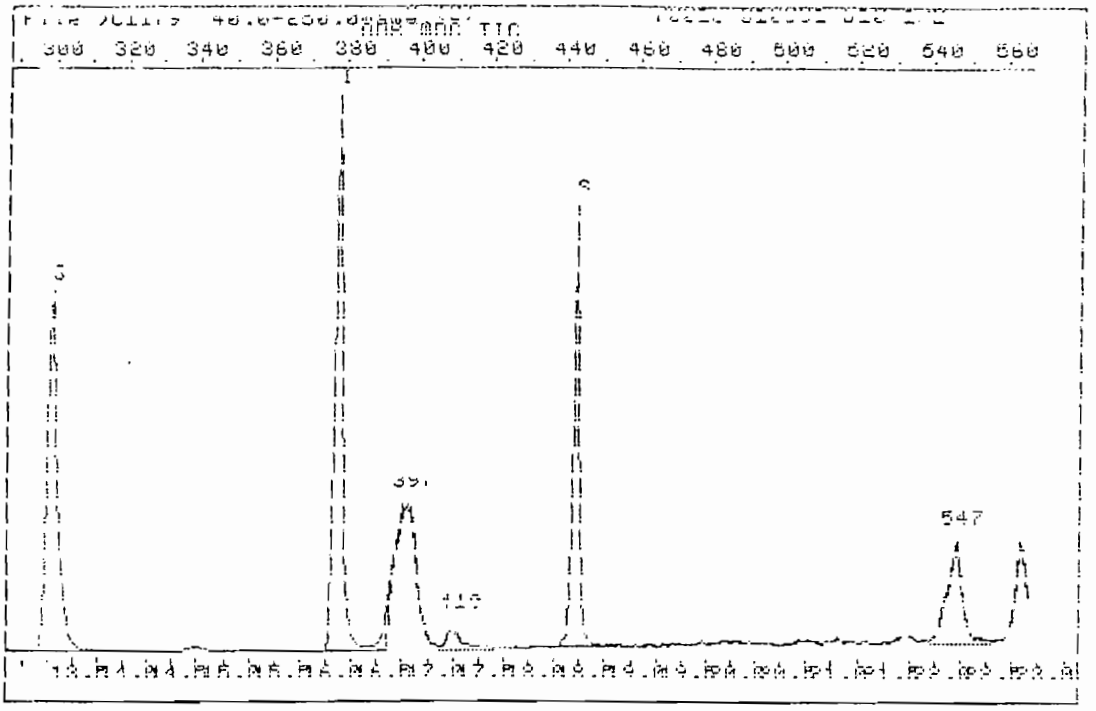
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

11:25 AM TUE., 8 MAY , 2001

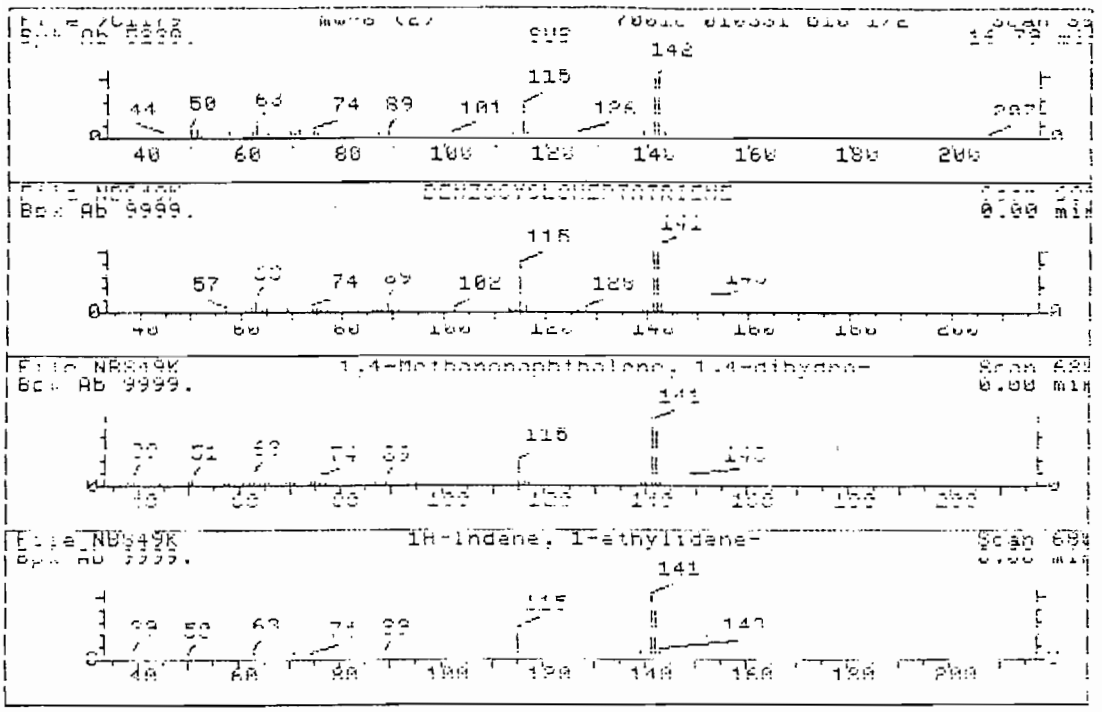




Instrument ID: 7001 Analyzed on: 4/12/01 14:11



Instrument ID: 7011 Analyzed on: 4/07/01 14:11

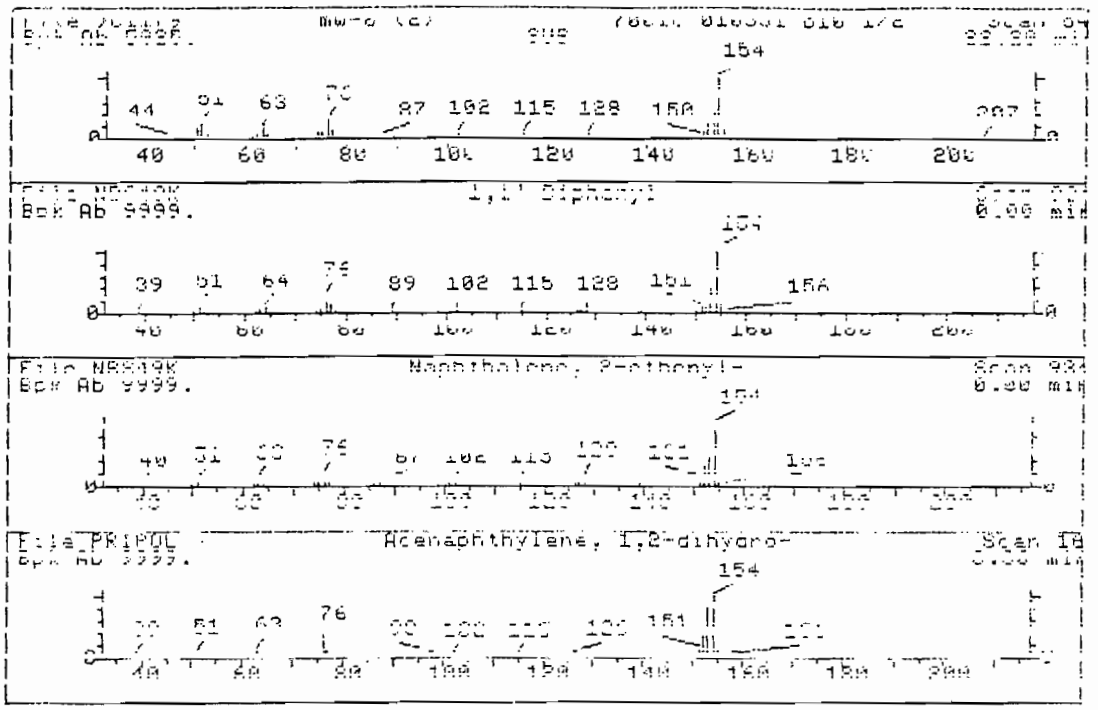


Instrument ID: 7001 Analyzed on: 4/17/01 14:11
Result 4 in PBM results file: LC1179
Retention Time: 16.29 Area: 443044 Tentative Conc: 39.00
The unknown area is 78.76% of the nearest internal standard

1. BENZOCYCLOHEPTATRIENE 147 C11H10
2. 1,4-Methanonaphthalene, 1,4-dihydro- 142 C11H10
3. 1H-Indene, 1-ethylidene- 142 C11H10
4. Naphthalene, 1-methyl- 142 C11H10
5. Naphthalene, 2-methyl- 142 C11H10
6. 1H-Indole-5-carbonitrile 142 C9H6N2

Sample file: >C1179 Spectrum #: 397
Search speed: 1 Tilting option: N No. of ion ranges searched: 47

	Prob.	CAS #	CON #	RUN#	K	OK	#Fit	TILT	%	CON	C	I	R	IO
1.	93*	2640195	18083	NB549K	89	19	1	0	69	4	68			
2.	71*	4453901	18081	NB549K	56	46	2	0	94	11	38			33
3.	68*	2471832	18082	NB549K	60	40	1	0	81	25	30			
4.	55*	90120	18080	NB549K	52	48	2	0	92	23	22			
5.	42*	91576	18084	NB549K	41	57	3	0	100	21	17			
6.	34*	15861242	18076	NB549K	46	48	2	0	100	44	12			



Instrument ID: 7001 Analyzed on: 4/07/01 14:11
Result 5 in PBM results file: LC1179
Retention Time: 22.20 Area: 194302 Tentative Conc: 17.00
The unknown area is 34.54% of the nearest internal standard

1.	1,1'-Biphenyl	154 C12H10
2.	Naphthalene, 2-ethenyl-	154 C12H10
3.	Acenaphthylene, 1,2-dihydro-	154 C12H10
4.	Acenaphthylene, 1,2-dihydro-	154 C12H10
5.	Acenaphthylene, 1,2-dihydro-	154 C12H10
6.	Acenaphthene (8CI)	154 C12H10

Clover

Sample file: >C1179 Spectrum #: 547
Search speed: 1 Tilting option: N No. of ion ranges searched: 56

	Prob.	CAS #	CON #	ROUT	K	DK	#Fits	TILT	%	CON	C I R IV
1.	86*	92524	20175	NBS49K	74	26	1	0	84	9	59
2.	69*	827543	20176	NBS49K	59	46	0	0	62	39	26 66
3.	62*	167	259	PR1POL	64	44	2	0	96	27	25 -
4.	62*	168	260	PR1POL	62	43	2	0	100	29	25 40
5.	59*	171	263	PR1POL	60	41	2	0	100	24	27 -
6.	59*	83529	20175	NBS49K	57	48	2	0	100	24	27 34

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8(3)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(3)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1166
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	4.	BJ
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	J
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	62.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	500.	E

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

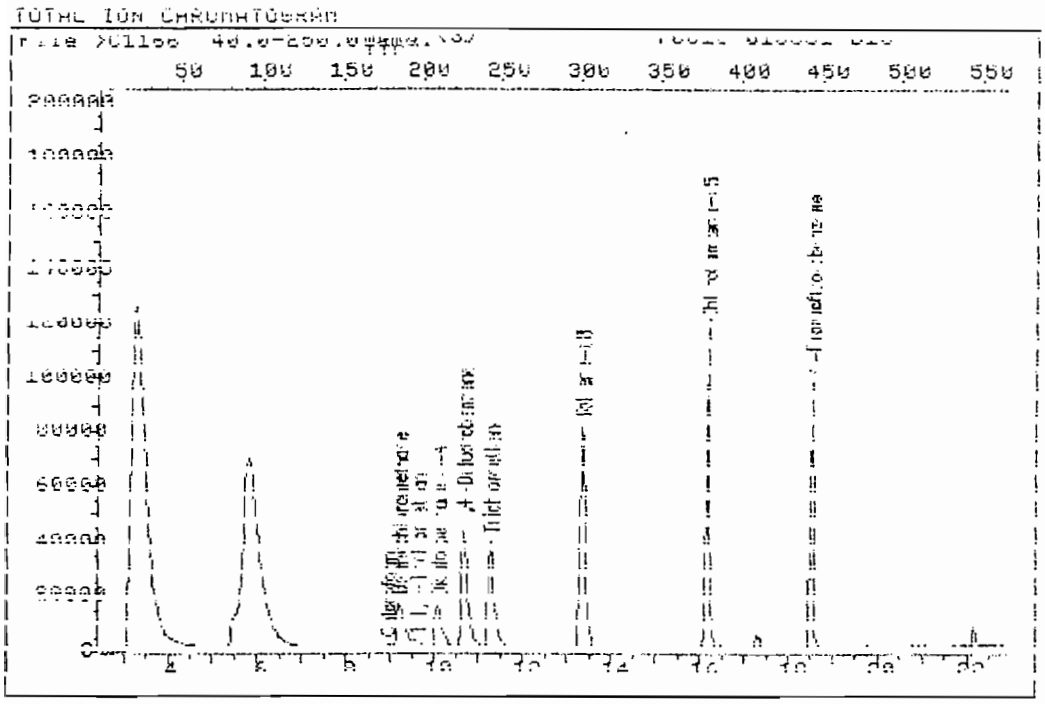
MW-8(3)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(3)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1166
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

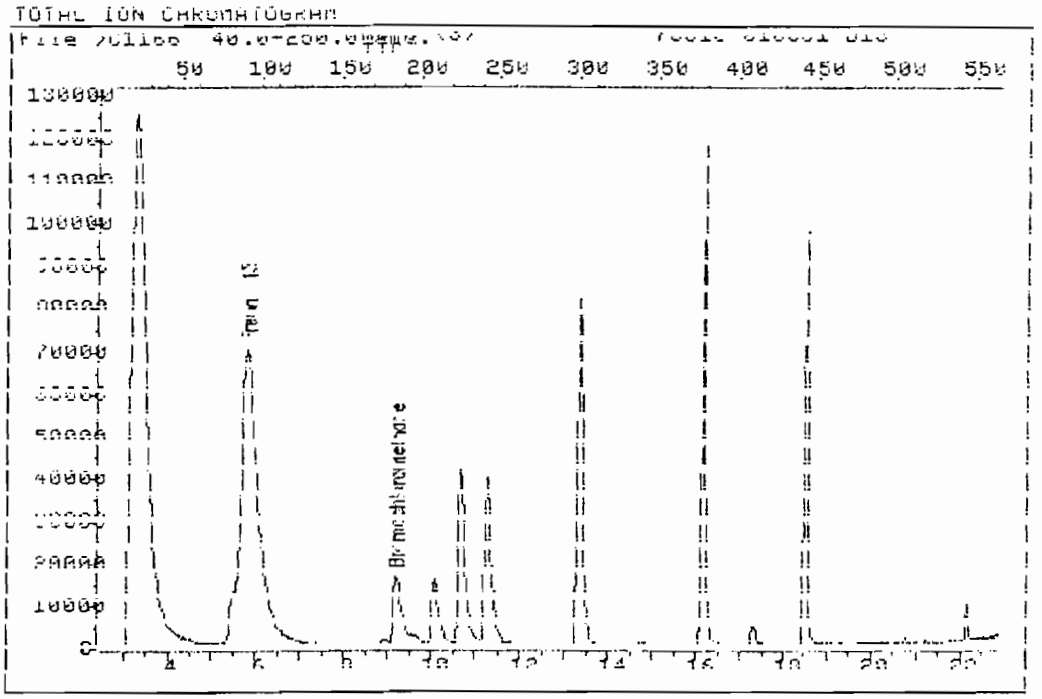
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					



Data File: >C:\166::03 Quant Output File: ^C:\166::QT
Name: mw-8 (3) Instrument ID: >\01 (.
Misc: 7001c 010331 b13

Id File: TUS910.::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Qcal Time: **\-06 09:.>

Operator ID: MANAGER
Quant Time : 010406 17:.-
Injected at: **0406 16:50



Data File: >C:166::03
Name: mw-8 (3)
Misc: 7001c 010331 b13

Quant Output File: 'C:166::QT
Instrument ID: >001 L

Id File: DF113::MT
Title: Freon 113 ID File
Last Calibration: :

Last Qcal Time: **-06 1?:??

Operator ID: MANAGER
Quant Time : 010473 14:
Injected at: **0406 16:50

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 010406 12:14
Output File: ^C1166::QT Injected at: **0406 16:50
Data File: >C1166::03 Dilution Factor: 1.000000
Name: mw-8 (3) Instrument ID: 7001 C
Misc: 7001c 010531 b13

ID File: IDS91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:51 Last Qual Time: **0406 09:53

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.18	128.0	18605	50.00	ug	
16)	Chloroform	8.93	83.0	6993	4.09	UG	90
19)	1,2-Dichloroethane-d4	10.08	65.0	22369	49.93	ug	
22)	*1,4-Difluorobenzene	10.66	114.0	129783	50.00	UG	99
23)	1,1,1-Trichloroethane	9.61	97.0	6095	4.87	ug	
29)	Trichloroethene	11.27	130.0	44081	62.09	UG	93
36)	*Chlorobenzene-d5	16.17	117.0	144620	50.00	ug	
42)	Toluene d-8	13.32	98.0	182498	52.48	UG	
48)	Bromofluorobenzene	18.51	95.0	82413	49.20	ug	

* Compound is ISTD

QUANT REPORT Page 1

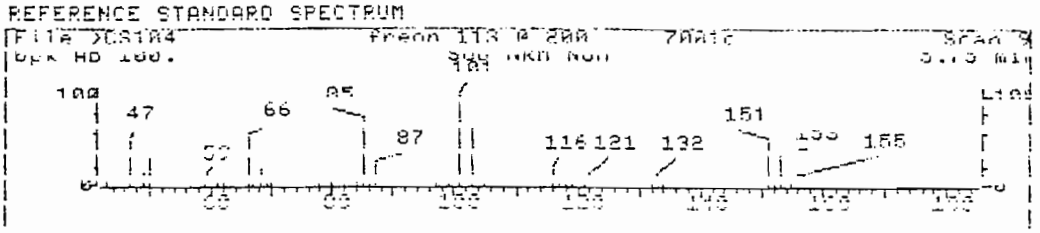
Operator ID: MANAGER Quant Rev: 7 Quant Time: 010493 14:08
Output File: 'C1166::QT Injected at: **0406 16:50
Data File: >C1166::D3 Dilution Factor: 1.000000
Name: mw-8 (3) Instrument ID: 7001 C
Misc: 7001c 010331 b13

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **0406 15:22

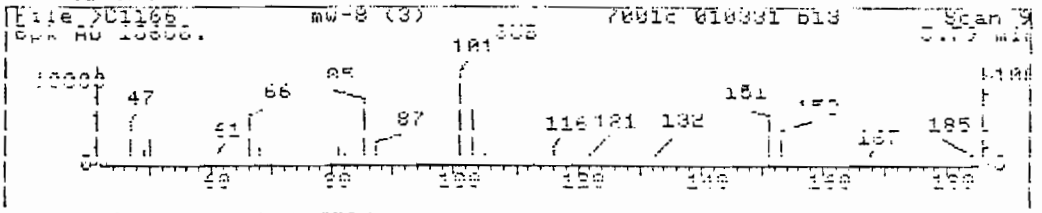
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.18	128.0	18429	50.00	ug	97
2)	Freon 113	5.79	101.0	268466	502.12	UG	96

* Compound is ISTD

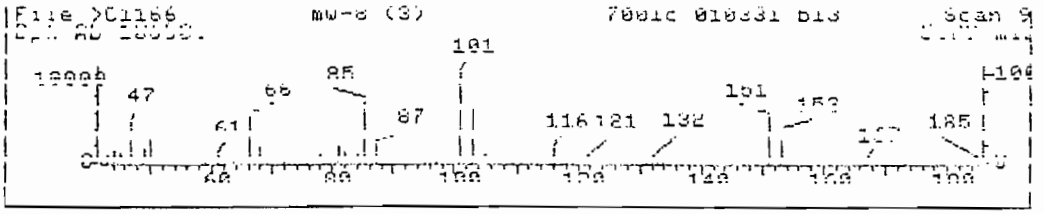
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

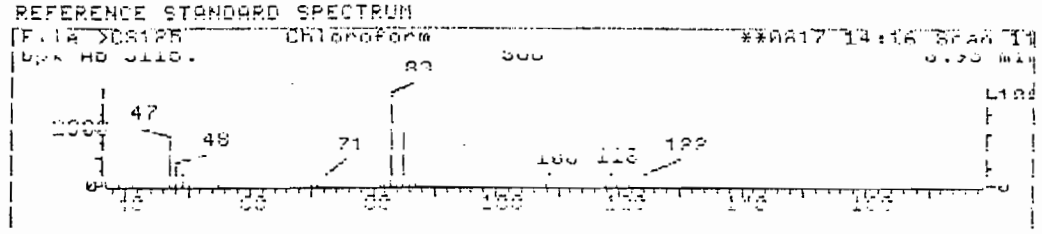


Data File: >C1166::03
Name: mw-8 (3)
Misc: 7001c 010331 b13
Quant Time: 010423 14:00
Injected at: **0406 16:50
Last Qcal Time: **0406 15:22

Quant Output File: 'C1166::QT
Instrument ID: 7001
Quant ID File: 10F113::MT
Last Calibration: :

Compound No : 2
Compound Name : Freon 113
Scan Number : 92
Retention Time: 5.79 min.
Quant Ion : 101.0
Area : 2684nA
Concentration : 502.17 UG
q-value : 96

REFERENCE STANDARD SPECTRUM



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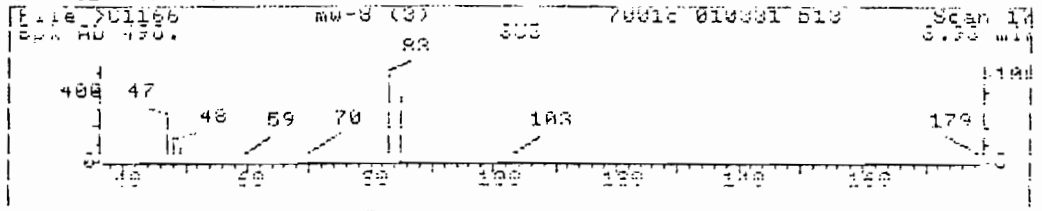

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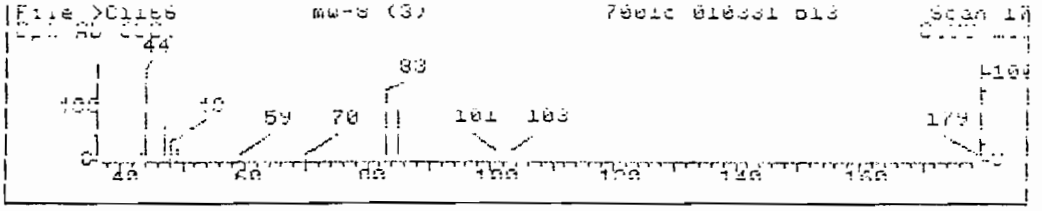


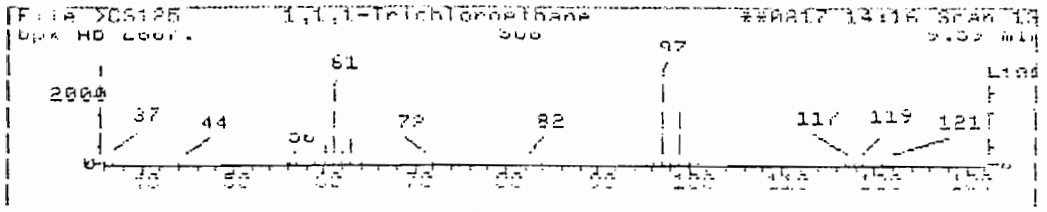
Data File: >C1166::03
Name: mw-8 (3)
Misc: 7001c 010331 b13
Quant Time: 010406 17:14
Injected at: **0406 16:50
Last Qcal Time: **0406 09:53

Quant Output File: ^C1166::QT
Instrument ID: 7001 C

Quant ID File: [illegible]
Last Calibration: 000H10 08:31

Compound No : 18
Compound Name : Chloroform
Scan Number : 179
Retention Time: 8.93 min.
Quant Ion : 83.0
Area : 69?5
Concentration : 4.09 UG
q-value : 90

REFERENCE STANDARD SPECTRUM



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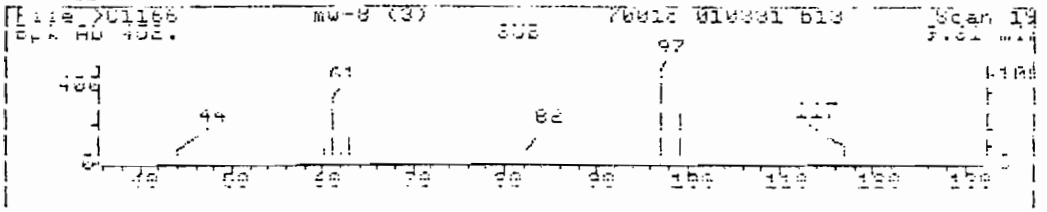

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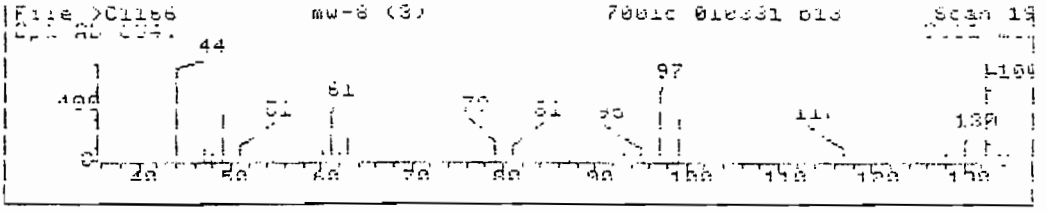
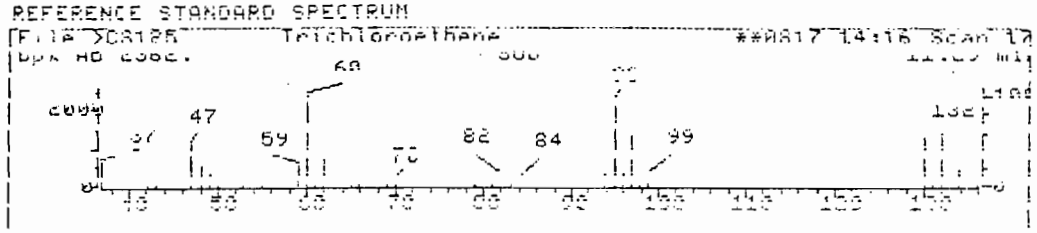


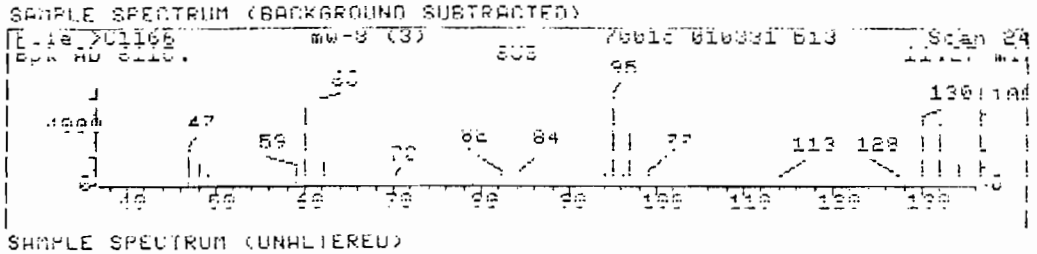
Data File: >C1166::03 Quant Output File: ^C1166::QT
Name: mw-8 (3) Instrument ID: >801 L
Misc: 7001c 010331 b13
Quant Time: 010406 17:14 Quant ID File: [...]910.::RT
Injected at: **0406 16:50 Last Calibration: 000810 08:51
Last Qcal Time: **0406 09:53

Compound No : 23
Compound Name : 1,1,1-Trichloroethane
Scan Number : 198
Retention Time: 9.61 min
Quant Ion : 97.0
Area : 605 >
Concentration : 4.87 UG
q-value : 94

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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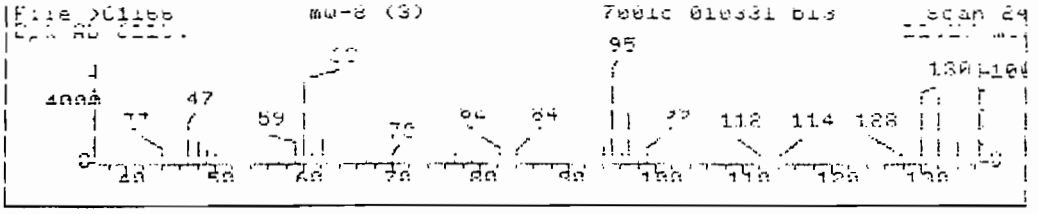
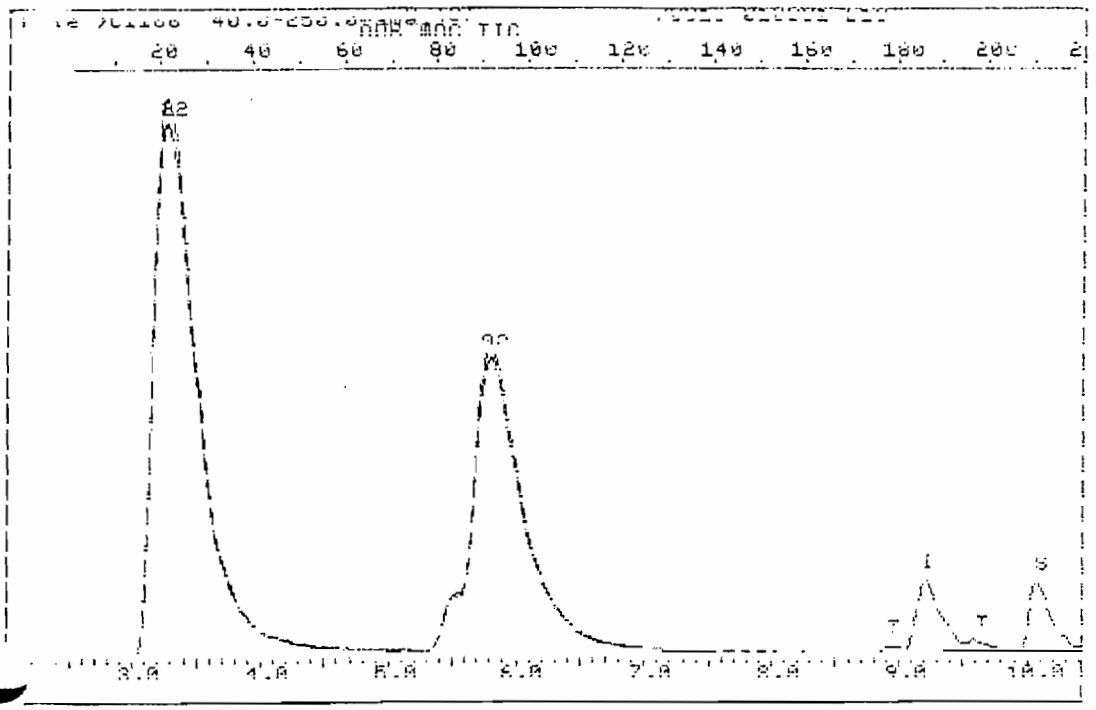


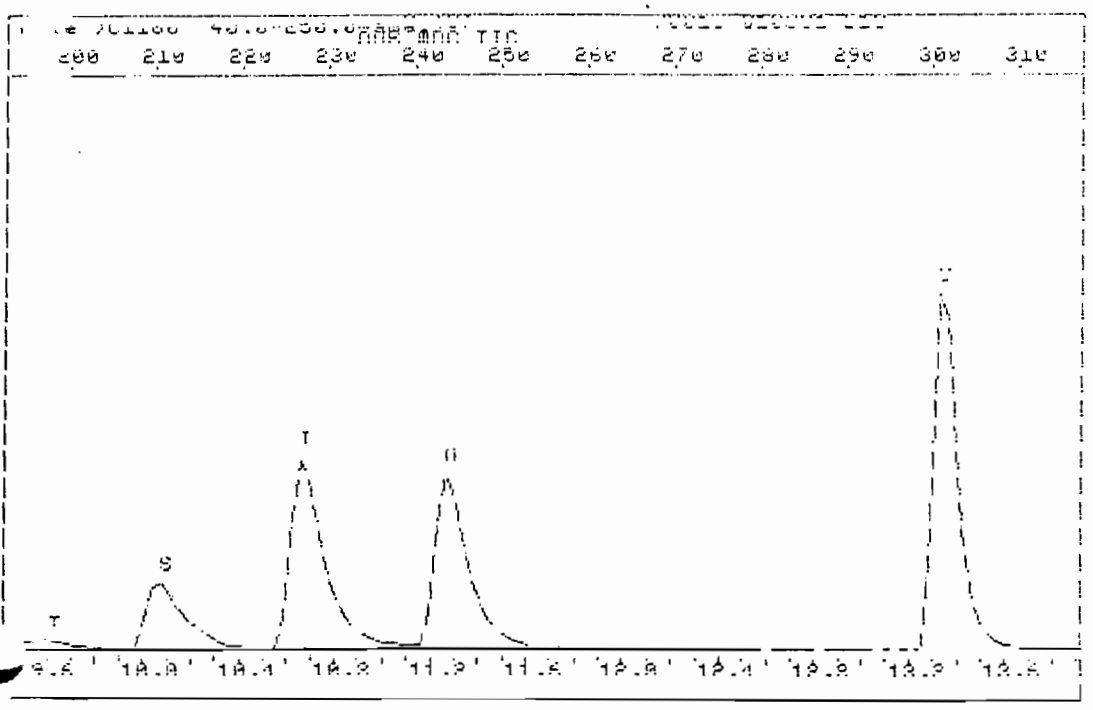
Data File: >C1166::03
Name: mw-8 (3)
Misc: 7001c 010331 b13
Quant Time: 010406 17:14
Injected at: **0406 16:50
Last Qcal Time: **0406 09:53

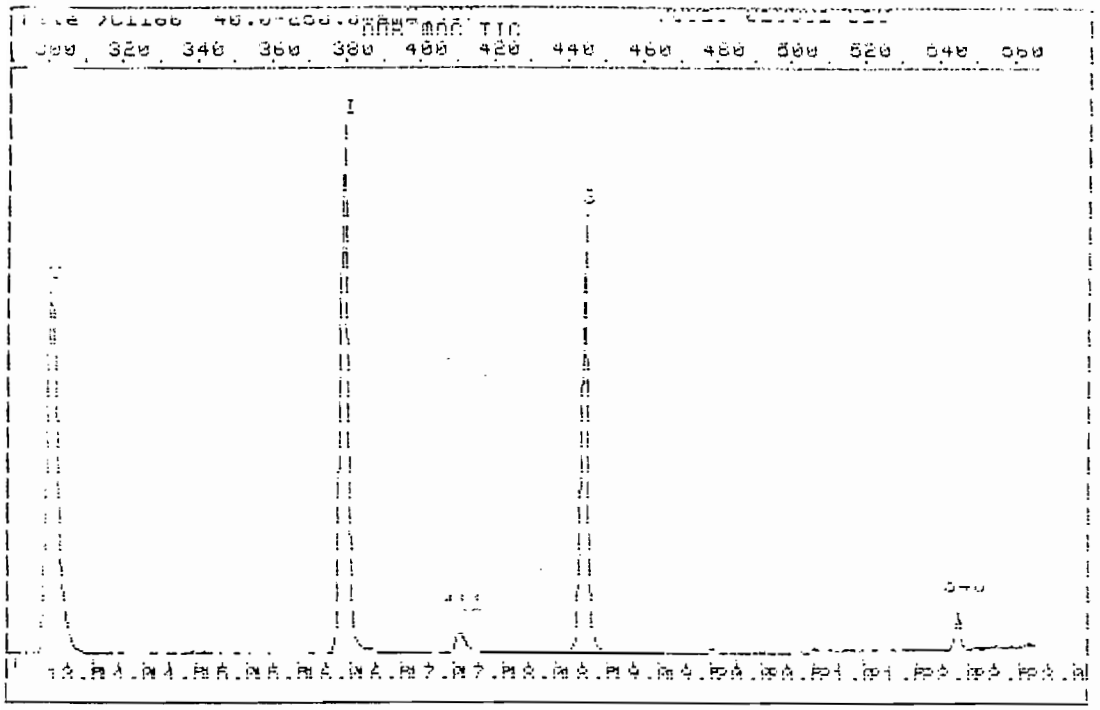
Quant Output File: >C1166::Q1
Instrument ID: >001 L
Quant ID File: [illegible]
Last Calibration: 000410 08:51

Compound No : 29
Compound Name : Trichloroethene
Scan Number : 244
Retention Time: 11.27 min.
Quant Ion : 130.0
Area : 4400
Concentration : 62.05 UG
q-value : 93

```
MS data file header from : >C:166::03

Sample: mw-8 (3)              Operator: MANAGER   SUPER GRP.    4/06/91 16:11
Misc  : 7001c 010331 bi>
Sys. #:    1  MS model:  70  Sw/Hw rev.: LF  ALS # :  0     Equip ID: 7001  C
  Method file: METH03    Tuning file: M19803   No. of extra records:  2
 Source temp.:   N/A  Analyzer temp.:  N/A     Transfer line temp. :   0

      Chromatographic temperatures :  45.   >50.   >>0.     0.     0.
      Chromatographic times, min.  :  3.0   33.0   33.0    0.0    0.0
      Chromatographic rate, deg/min:  8.0     .1    0.0     .2     0.0


>:.:166         mw-8 (3)              7001c 010331 bi>
  40.01 250.0 I.P 1IC
Upslope:  .20000 Area Reject:    1943.  Max Peaks:  4  Bunch: -1 Valley >100 %
Unslope: 0.00000 Results File :C:166   Sorted by Time/Area       INT

Peak    R.T.   first    max    last     peak       raw       corr.     corr.     % of
  #     min.   scan     scan   scan     height     area      area    % max.      total
---   ------  -----    -----  -----    ------   --------  --------  --------  --------
  1     3.27      13       22     71     12493   3128232   >088198    100.00     60.
  2     5.79      77       92    134      6912   2196588   1922409    62.52     37.
  3    17.29     405      411    422       512     76212     4>>93     1.4>      .8 1
  4    22.16     542      546    549       884     61243     >>565     1.09      .661

                          Sum of corrected areas:     >088641.

      Summary of Unknowns PBM Library Search and Quantitation

                                                Retention       Unknown
      Standard   Concentration    Area           Time          Window
      --------   -------------  ---------    ---------    ----------------
         1            50.0       19427.        9.18       2.51 -    9.92
         2            50.0       44>67.       10.66       9.92 -   13.41
         3            50.0       623015.      16.17      13.41 -   22.88

   Dilution Factor =     1.00          This sample was 1000.00  ng or ml

 Correction Factor =     1.00

                          |Conc Int Std * Area Unknown|
Unknown Concentration =   |---------------------------| * Correction Factor
                          |       Area Int Std        |

                                                6:15 PM  MON., 2> APR., 2001
```







Instrument ID: 7011 Analyzed on: 4/16/11 16:50

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-8(3) DL

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(3) DL
Sample wt/vol: 1.000 (g/mL) ML Lab File ID: C1177
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/07/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50.	U
74-83-9	Bromomethane	50.	U
75-01-4	Vinyl Chloride	50.	U
75-00-3	Chloroethane	50.	U
75-09-2	Methylene Chloride	25.	U
67-64-1	Acetone	50.	U
75-15-0	Carbon Disulfide	25.	U
75-35-4	1,1-Dichloroethene	25.	U
75-34-3	1,1-Dichloroethane	25.	U
156-60-5	1,2-Dichloroethene-trans	25.	U
67-66-3	Chloroform	15.	BJ
107-06-2	1,2-Dichloroethane	25.	U
78-93-3	2-Butanone	50.	U
71-55-6	1,1,1-Trichloroethane	5.	J
56-23-5	Carbon Tetrachloride	25.	U
75-27-4	Bromodichloromethane	25.	U
78-87-5	1,2-Dichloropropane	25.	U
10061-01-5	cis-1,3-Dichloropropene	25.	U
79-01-6	Trichloroethene	61.	
124-48-1	Dibromochloromethane	25.	U
79-00-5	1,1,2-Trichloroethane	25.	U
71-43-2	Benzene	25.	U
10061-02-6	trans-1,3-Dichloropropene	25.	U
75-25-2	Bromoform	25.	U
108-10-1	4-Methyl-2-Pentanone	50.	U
591-78-6	2-Hexanone	50.	U
127-18-4	Tetrachloroethene	25.	U
79-34-5	1,1,2,2-Tetrachloroethane	25.	U
108-88-3	Toluene	25.	U
108-90-7	Chlorobenzene	25.	U
100-41-4	Ethylbenzene	25.	U
100-42-5	Styrene	25.	U
156-59-2	1,2-Dichloroethene-cis	25.	U
106-42-3	m,p-Xylenes	25.	U
95-47-6	o-Xylene	25.	U
76-13-1	Freon 113	520.	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

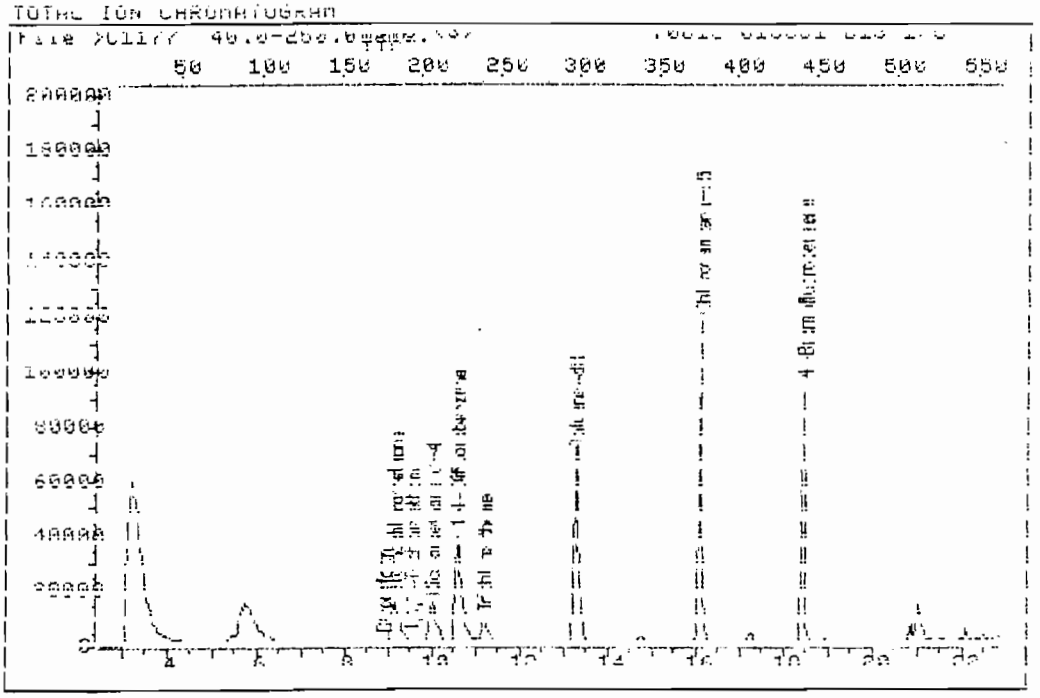
MW-8(3) DL

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-8(3) DL
Sample wt/vol: 1.000 (g/mL) ML Lab File ID: C1177
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/07/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

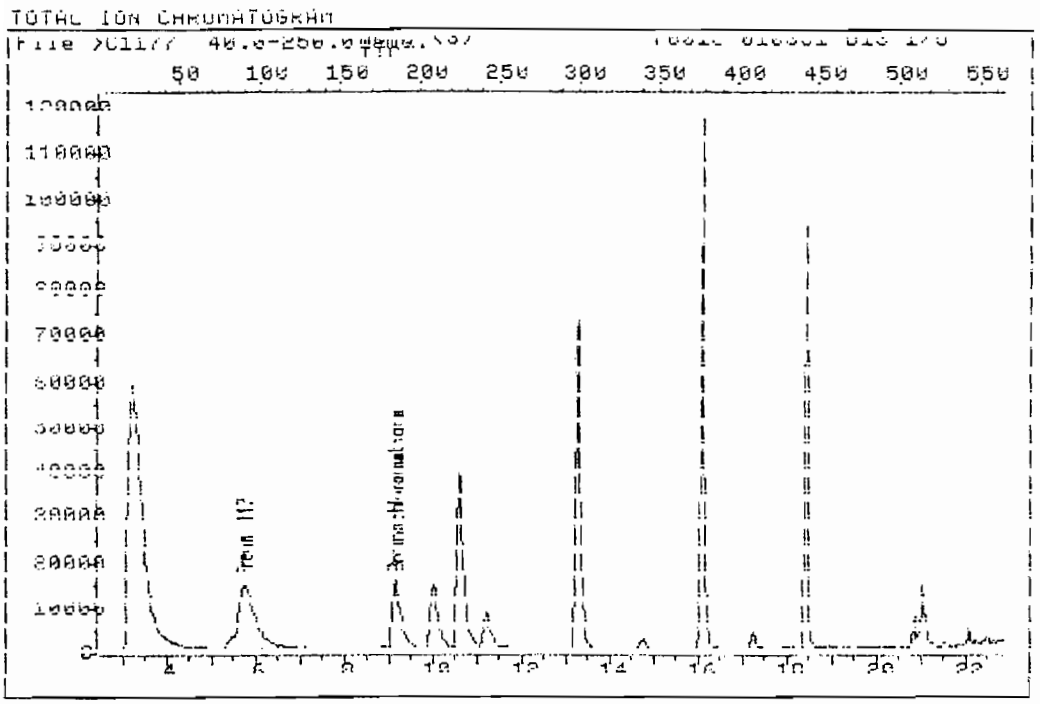
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					



Data File: >C1177::03 Quant Output File: ^C1177::QT
Name: mw-8 (3) Instrument ID: >801 L
Misc: 20Ulc 010331 b13 1/5

Id File: 10591C::mT
Title: HP 00A Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Qcal Time: **-407 1?:-4

Operator ID: MANAGER
Quant Time : 010407 13:??
Injected at: **0407 13:12



Data File: >C1177::03 Quant Output File: 'C1177::QT
Name: mw-8 (3) Instrument ID: >H01 C
Misc: 7001c 010331 b13 1/5

Id File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qual Time: **0407 11:44

Operator ID: MANAGER
Quant Time : 010423 11:??
Injected at: **0407 13:12

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 2 Quant Time: 011407 12:12
Output File: ^C1172::QT Injected at: **0407 13:12
Data File: >C1172::03 Dilution Factor: 1.00000
Name: mw-8 (3) Instrument ID: 2000 C
Misc: 2000c 010331 a13 125

ID File: ID591C::MT
Title: HP 0/8 Continuing Calibration standa n
Last Calibration: 000810 08:31 Last Qcal Time: **0407 11:44

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.14	128.0	19590	50.00	ug	?
18)	Chloroform	8.89	83.0	40005	2.90	ug	82
19)	1,2-Dichloroethane-d4	10.01	65.0	66648	49.29	ug	?
22)	*1,4-Difluorobenzene	10.58	114.0	119282	50.00	ug	96
23)	1,1,1-Trichloroethane	9.54	97.0	1252	1.08	ug	0
29)	Trichloroethene	11.20	130.0	8129	12.12	ug	98
36)	*Chlorobenzene-d5	10.10	117.0	139459	50.00	ug	?
42)	Toluene d-8	13.25	98.0	168846	48.65	ug	92
48)	Bromofluorobenzene	18.44	95.0	25984	47.59	ug	0

* Compound is ISTD

QUANT REPORT Page 1

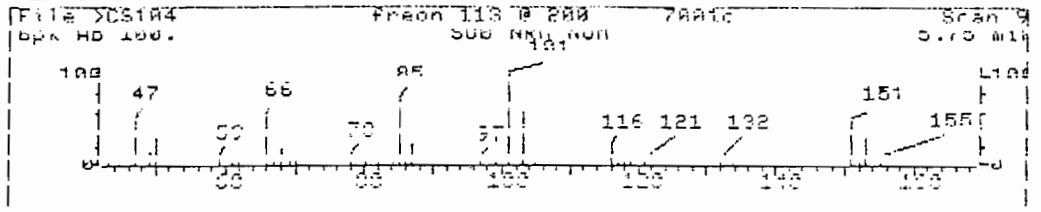
Operator ID: MANAGER Quant Rev: 7 Quant Time: 010423 11:55
Output File: 'C1177::QT Injected at: **0407 13:12
Data File: >C1177::03 Dilution Factor: 1.000000
Name: mw-8 (3) Instrument ID: 7001 C
Misc: 7001c 010331 b13 1/5

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **0407 11:44

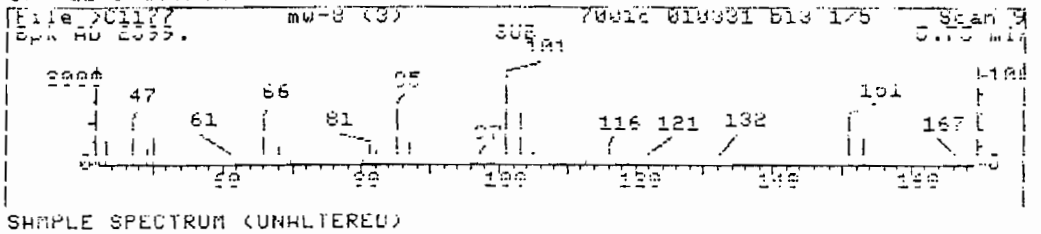
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.14	128.0	15550	50.00	UG	97
2)	Freon 113	5.75	101.0	51821	104.78	UG	91

* Compound is ISTD

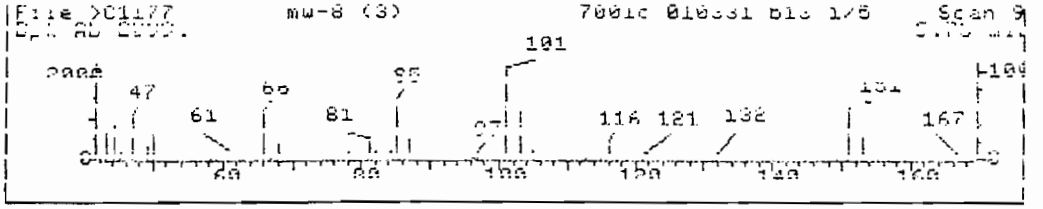
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

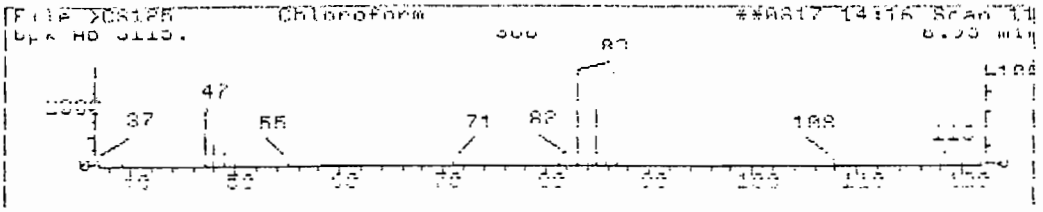


Data File: >C1177::03
Name: mw-8 (3)
Misc: 7001c 010331 b13 1/5
Quant Time: 010423 11:55
Injected at: **0407 13:12
Last Qcal Time: **0407 11:44

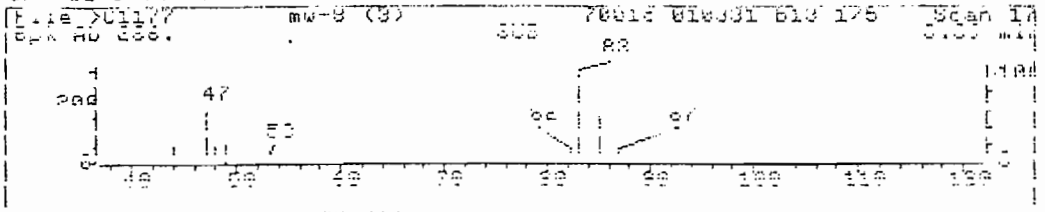
Quant Output File: 'C1177::QT
Instrument ID: /0101 t.
Quant ID File: [...]113::QT
Last Calibration: :

Compound No : 2
Compound Name : Freon 1[illegible]
Scan Number : 91
Retention Time: 5.25 min.
Quant Ion : 101.0
Area : 5187[illegible]
Concentration : 104.78 UG
q-value : 91

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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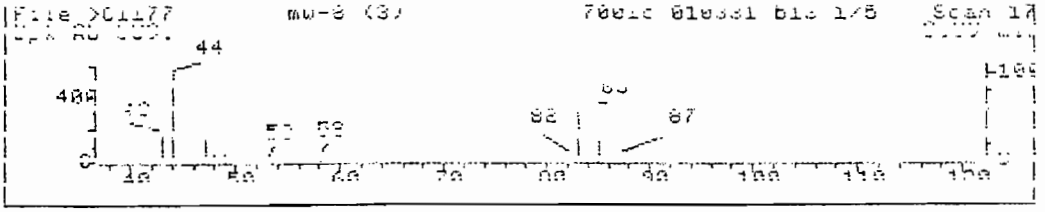
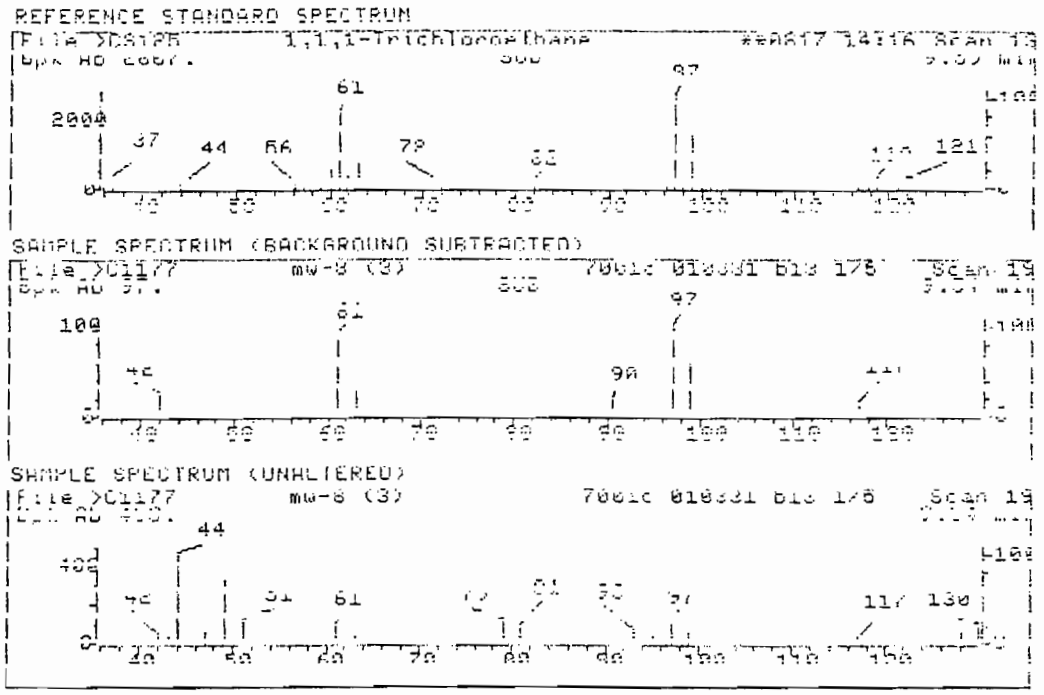


Data File: >C1177::03
Name: mw-8 (3)
Misc: 7001c 010331 b13 1/5
Quant Time: 010407 13:55
Injected at: **0407 13:12
Last Qcal Time: **0407 11:44

Quant Output File: ^C1177::QT
Instrument ID: >101
Quant ID File: 0891C::QT
Last Calibration: 000810 08:51

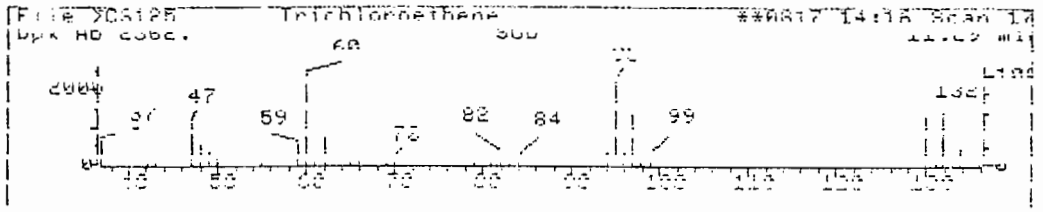
Compound No : 18
Compound Name : Chloroform
Scan Number : 178
Retention Time: 8.89 min.
Quant Ion : 83.0
Area : 40[illegible]
Concentration : 2.90 UG
q-value : 82



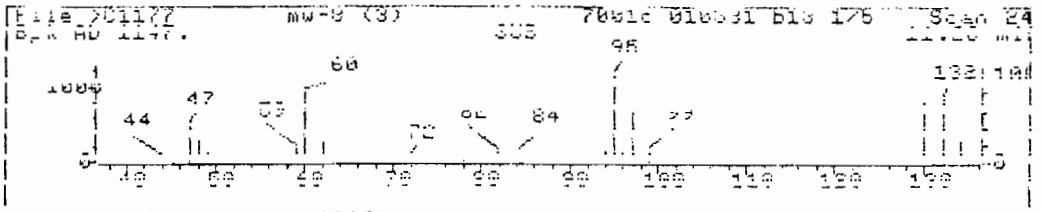
Data File: >C1177::03 Quant Output File: ^C1177::QT
Name: mw-8 (3) Instrument ID: ...01 ...
Misc: 7001c 010331 b13 175
Quant Time: 010407 13:55 Quant ID File: ...91C:...
Injected at: **0407 13:12 Last Calibration: 00...10 08:51
Last Qcal Time: **0407 ...:44

Compound No : 23
Compound Name : 1,1,1-Trichloroetha e
Scan Number : 196
Retention Time: 9.54 min.
Quant Ion : 97.0
Area : 12...
Concentration : 1.08 UG
q-value : 90

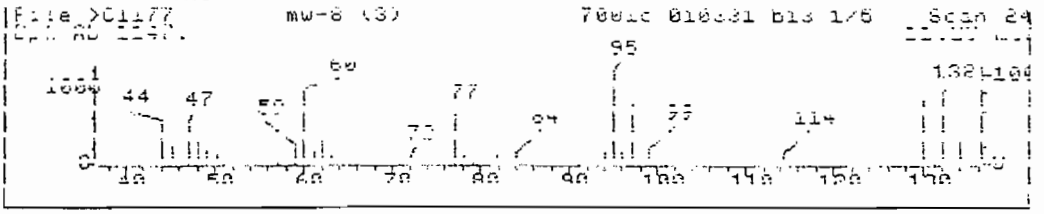
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >C1177::03
Name: mw-8 (3)
Misc: 7001c 010331 b13 1/5
Quant Time: 010407 13:35
Injected at: **0407 13:12
Last Qcal Time: **0407 11:44

Quant Output File: >C1177::QT
Instrument ID: >001
Quant ID File: [illegible]
Last Calibration: 000410 08:51

Compound No : 29
Compound Name : Trichloroethene
Scan Number : 242
Retention Time: 11.20 min.
Quant Ion : 130.0
Area : 81??
Concentration : 12.12 UG
q-value : 98

MS data file header from : >C1177::D3

Sample: mw-8 (3) Operator: MANAGER SUPER GRP. 4/[illegible]/01 [illegible]:12
Misc : 7001c 010331 b13 1/9
Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7000 C
Method file: METH03 Tuning file: MT9000 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	230.	230.	0.	0.
Chromatographic times, min. :	5.0	55.0	55.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0

>C1177 mw-8 (3) 7000c 010331 b13 1/9
40.01 250.0 CLP 10C
Upslope: .20000 Area Reject: 20/12. Max Peaks: 6 Bunch: -1 Valley 100 %
Onslope: 0.0000 Results File DL1177 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	3.19	13	20	61	58959	1470621	1442471	100.000	21.130
2	5.75	78	91	112	14184	458710	387112	26.49	18.835
3	14.76	336	341	347	2573	41684	24146	1.68	1.183
4	17.25	403	411	420	4012	62525	33722	2.34	1.662
5	20.86	504	510	511	6978	94170	36146	2.52	1.772
6	21.04	511	515	525	13609	154269	109881*	7.62	5.416

Sum of corrected areas: 2028278.

Summary of Unknowns PBM Library Search and Quantitation

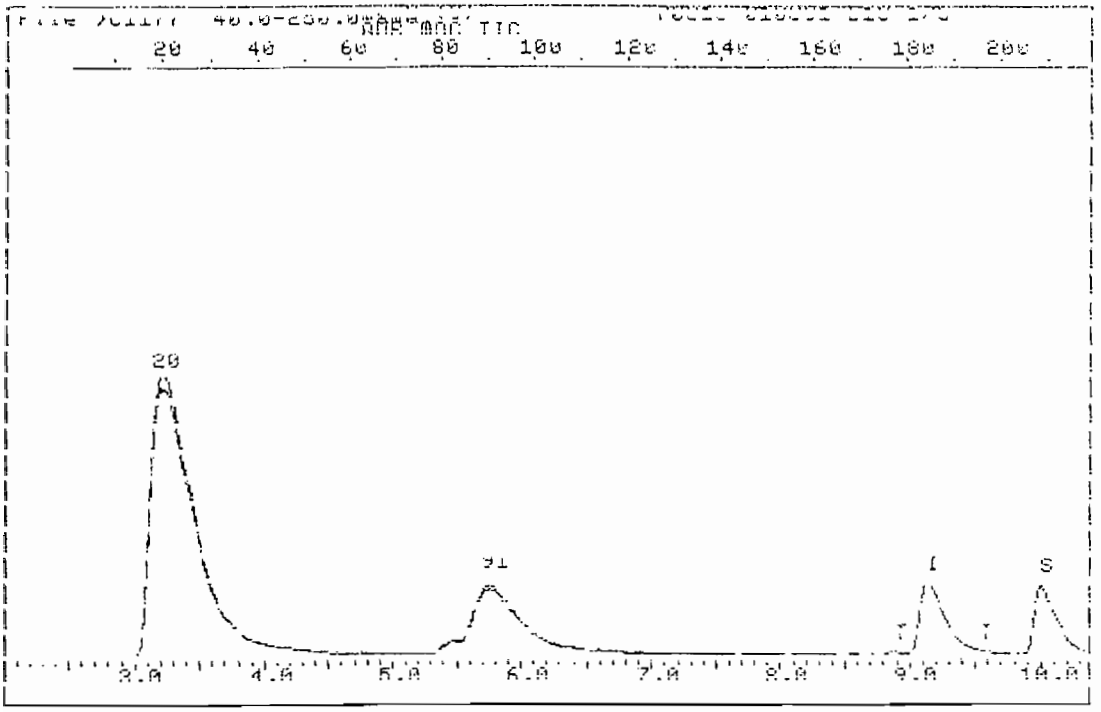
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	207174.	9.14	7.51 - 9.80
2	50.0	417788.	11.98	9.86 - 13.54
3	50.0	590145.	16.10	13.52 - 27.14

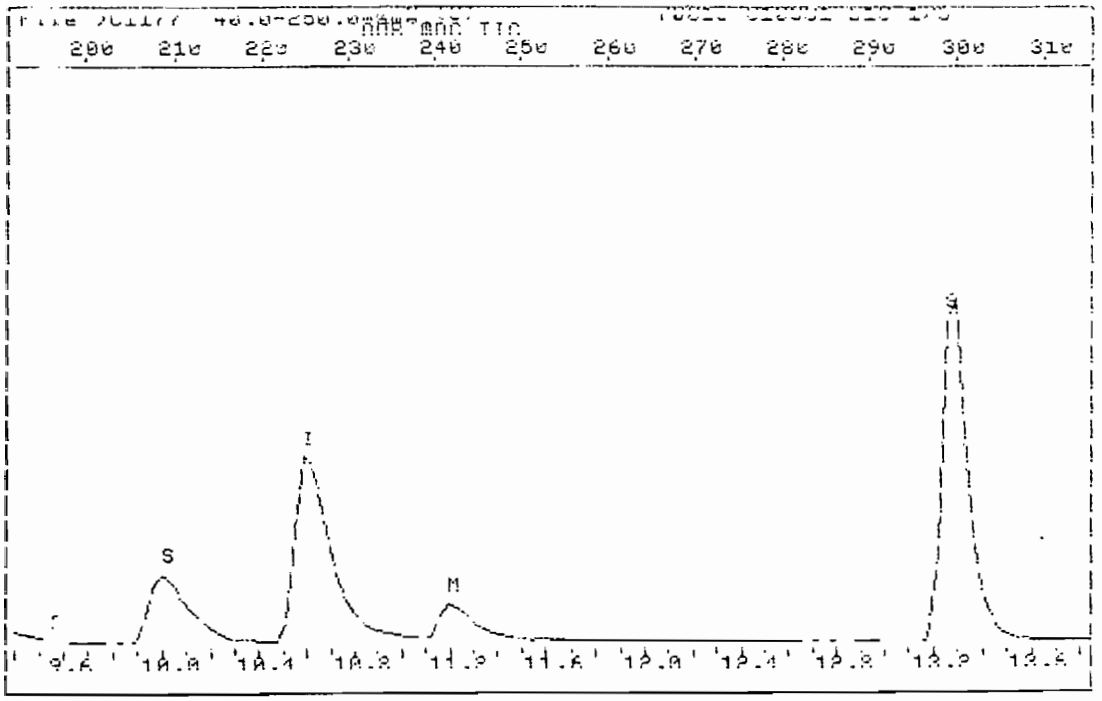
Dilution Factor = 1.00 This sample was 1000.00 g or mL

Correction Factor = 1.00

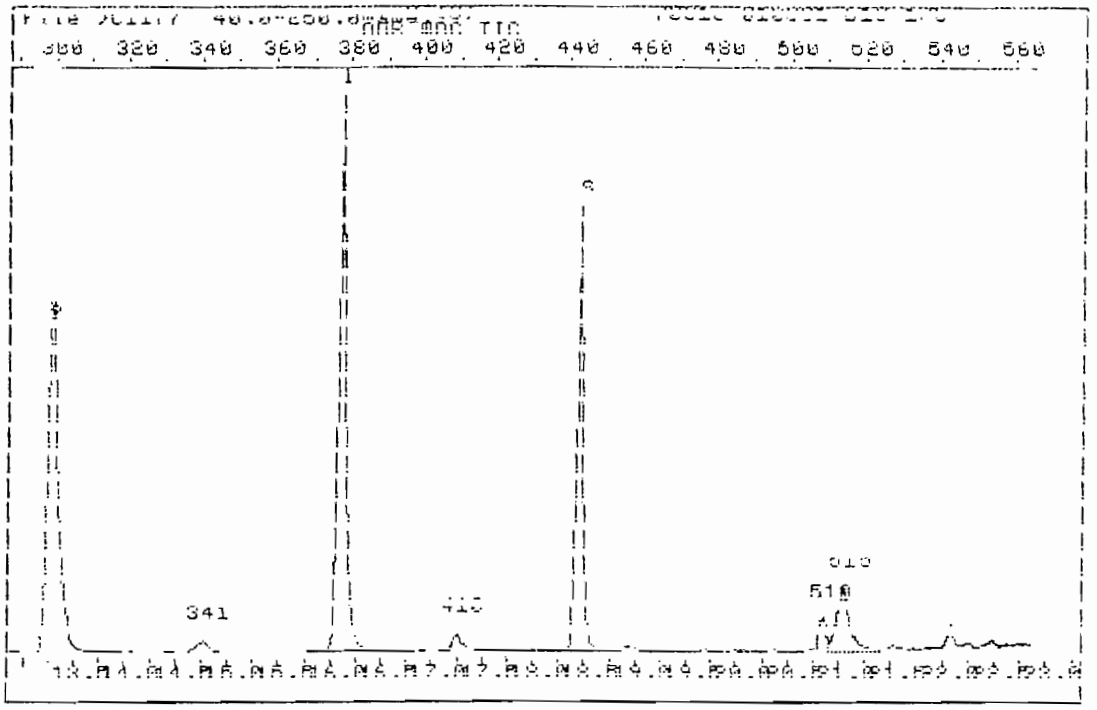
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

10:52 AM TUE., 8 MAY , 2001





Instrument ID: 7001 Analyzed on: 4/11/01 13:12



Instrument ID: 7001 Analyzed on: 4/02/01 13:12

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-9(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-9(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1164
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	3.	J
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	J
75-34-3	1,1-Dichloroethane	4.	J
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	15.	
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	21.	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-9(2)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-9(2)
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1164
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Oxygenated compound	17.32	12.	J
2.		Unknown	22.15	12.	J
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
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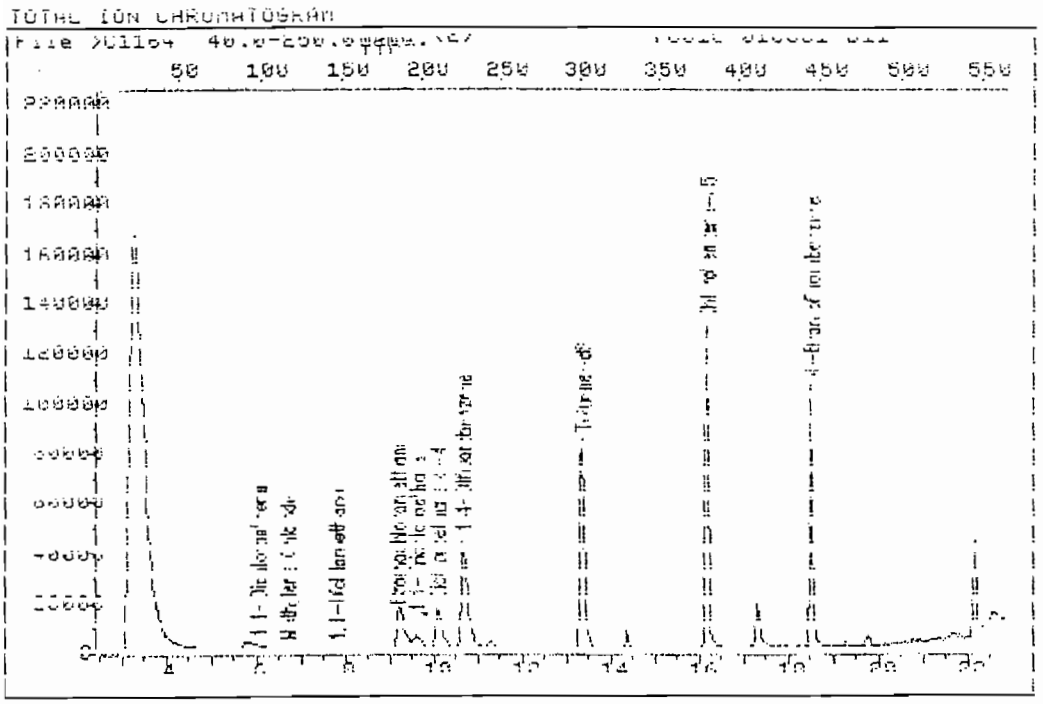
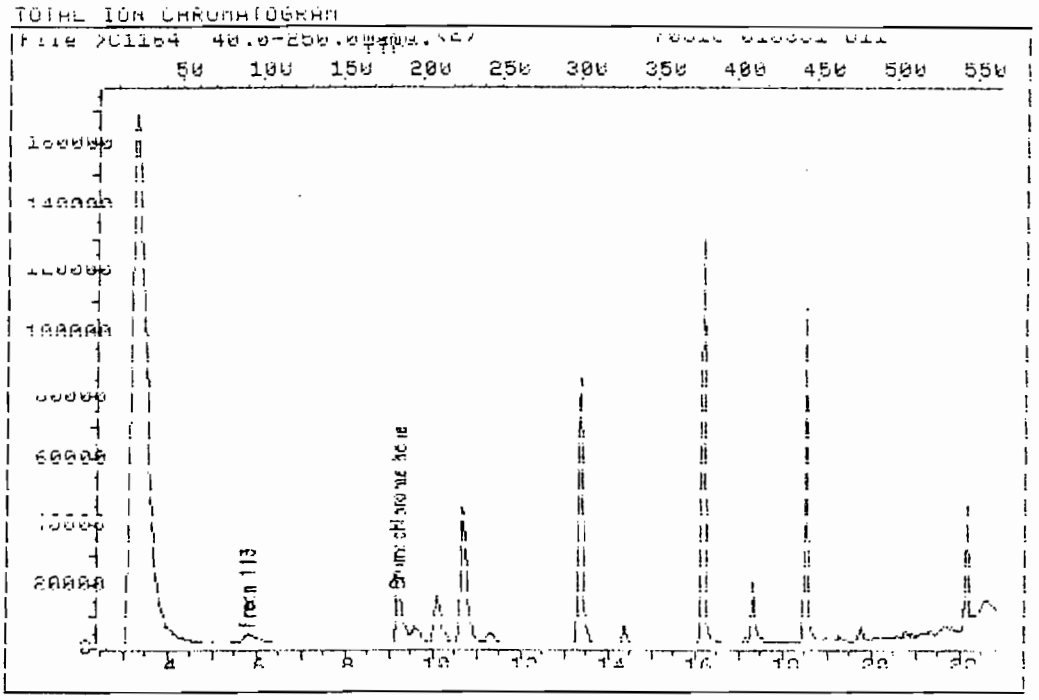
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					



Data File: >C1164::03 Quant Output File: ^C1164::QT
Name: mw-9 (2) Instrument ID: .001 C
Misc: 7001c 010331 b11

Id File: 1US91.::MT
Title: HP U0A Continuing Calibration Standard
Last Calibration: 000810 08:51 Last Qcal Time: **-**6 05:>

Operator ID: MANAGER
Quant Time : 010406 16:.>
Injected at: **0406 15:51



Data File: >C1164::03
Name: MW-9 (2)
Misc: 7001c 010331 b11

Quant Output File: 'C1164::QT
Instrument ID: 7401 C

Id File: IDF11?::MT
Title: Freon 113 ID File
Last Calibration: :

Last Qcal Time: **0406 15:??

Operator ID: MANAGER
Quant Time : 010423 14:..
Injected at: **0406 15:51

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 011486 10:19
Output File: ^C1164::QT Injected at: **1486 15:51
Data File: >C1164::03 Dilution Factor: 1.0000
Name: mw-9 (2) Instrument ID: 2000 C
Misc: 2001c 010331 b11

ID File: 10591C::MT
Title: HP V0A Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Qcal Time: **1486 09:53

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.17	128.0	18152	50.00	ug	11
6)	Methylene Chloride	6.68	84.0	1072	2.92	UG	91
13)	1,1-Dichloroethene	6.04	96.0	1459	4.99	ug	10
14)	1,1-Dichloroethane	7.80	63.0	3964	4.87	UG	25
19)	1,2-Dichloroethane-d4	10.07	67.0	29162	46.82	ug	1
22)	*1,4-Difluorobenzene	10.65	114.0	154208	50.00	UG	
23)	1,1,1-Trichloroethane	9.60	97.0	1917	14.81	ug	
36)	*Chlorobenzene-d5	16.17	117.0	152671	50.00	UG	
42)	Toluene d-8	13.35	98.0	191609	50.46	ug	17
48)	Bromofluorobenzene	18.51	95.0	91054	50.93	UG	81

* Compound is ISTD

QUANT REPORT Page 1

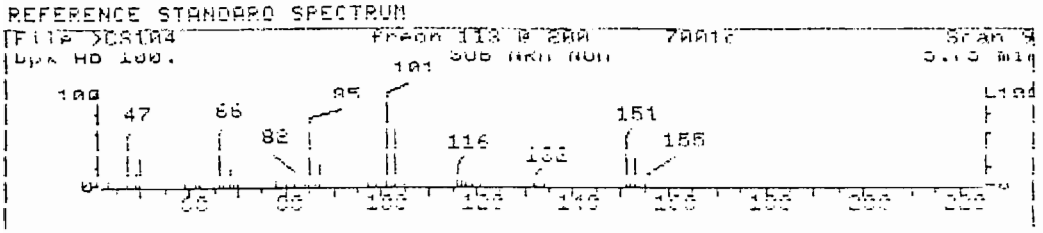
Operator ID: MANAGER Quant Rev: 7 Quant Time: 011423 14:00
Output File: 'C1164::QT Injected at: **0406 15:51
Data File: >C1164::03 Dilution Factor: 1.00000
Name: mw-9 (2) Instrument ID: 7001 C
Misc: 7001c 010331 b11

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **0406 15:22

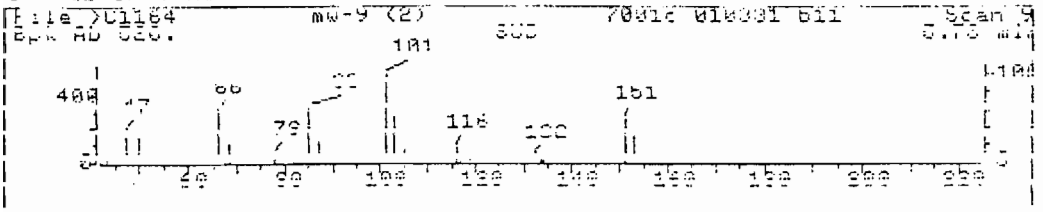
Compound	R.T.	Q ion	Area	Conc	Units	q
1) *Bromochloromethane	9.17	128.0	18133	50.00	ug	99
2) Freon 113	5.78	101.0	10926	21.82	UG	93

* Compound is ISTD

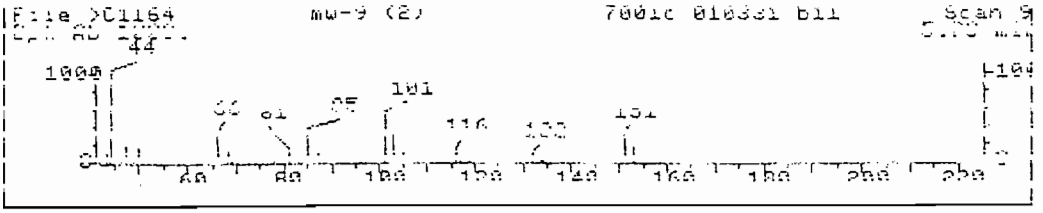
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

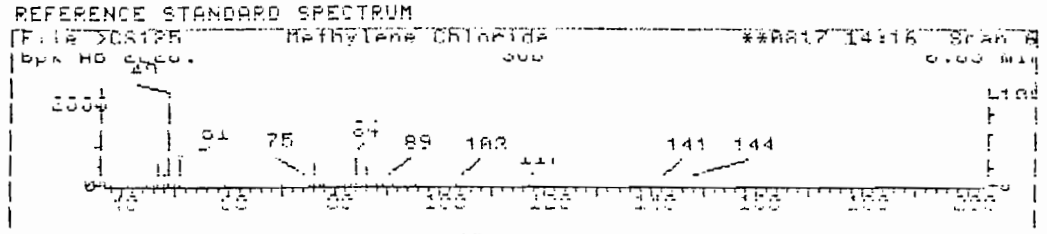


Data File: >C1164::03
Name: mw-9 (2)
Misc: 7001c 010331 b11
Quant Time: 010423 14:00
Injected at: **0406 15:51
Last Qcal Time: **0406 15:22

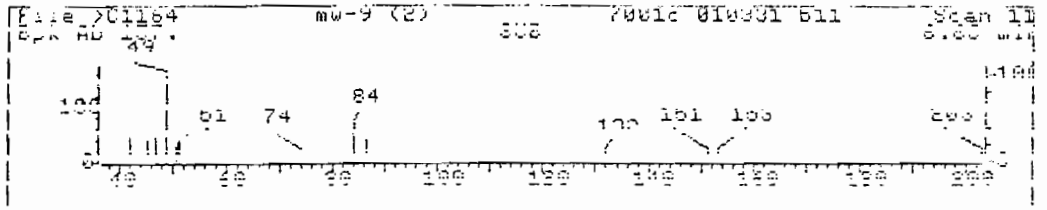
Quant Output File: 'C1164::QT
Instrument ID: >a01 C.
Quant ID File: [ur113::mf
Last Calibration: :

Compound No : 2
Compound Name : Freon 1..
Scan Number : 92
Retention Time: 5.28 mi..
Quant Ion : 101.0
Area : 109?n
Concentration : 20.82 UG
q-value : 93

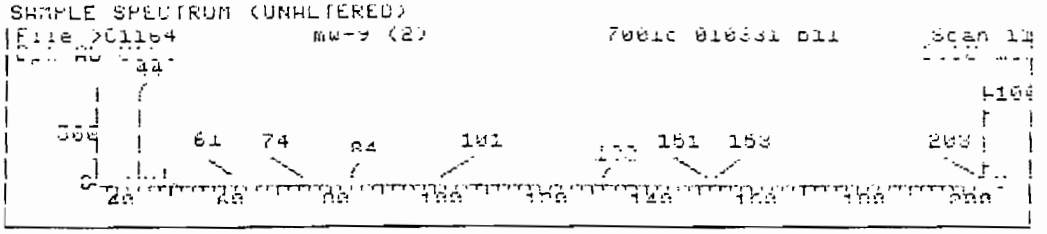
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



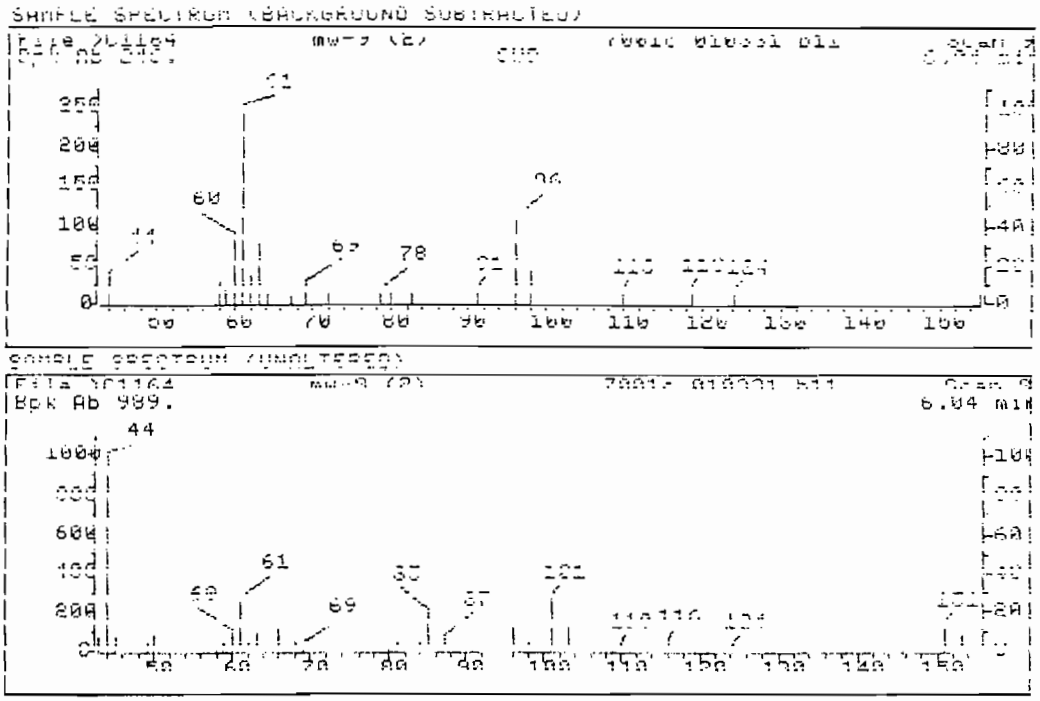
SAMPLE SPECTRUM (UNALTERED)



Data File: >C1164::03
Name: mw-9 (2)
Misc: 7001c 010331 b11
Quant Time: 010406 16:15
Injected at: **0406 15:91
Last Qcal Time: **0406 09:53

Quant Output File: >C1164::QT
Instrument ID: >001 L
Quant ID File: 1::91L::mf
Last Calibration: 0000410 08:31

Compound No : 6
Compound Name : Methylene Chloride
Scan Number : 117
Retention Time: 6.68 min.
Quant Ion : 84.0
Area : 10.7
Concentration : 2.92 UG
q-value : 91

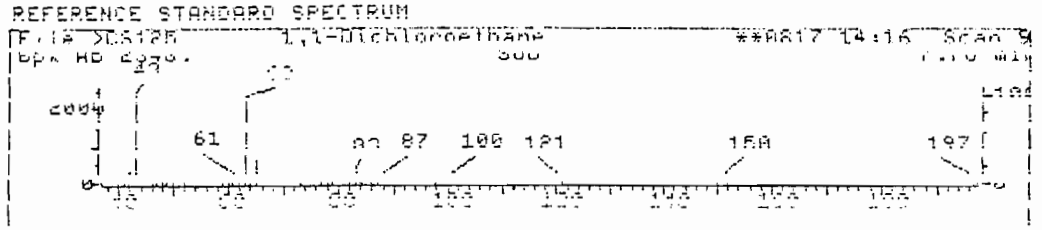


Data File: >C1164::03
Name: mw-9 (2)
Misc: 7001c 010331 b11
Quant Time: 010406 16:15
Injected at: **0406 15:51
Last Qcal Time: **0406 09:53

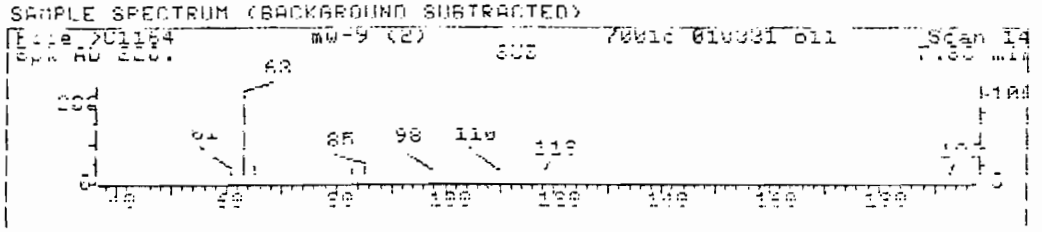
Quant Output File: ^C1164::QT
Instrument ID: /001 :
Quant ID File: [...]
Last Calibration: 000810 08:31

Compound No : 13
Compound Name : 1,1-Dichloroethene
Scan Number : 99
Retention Time: 6.04 min.
Quant Ion : 96.0
Area : 14[illegible]
Concentration : 4.99 UG
q-value : 76

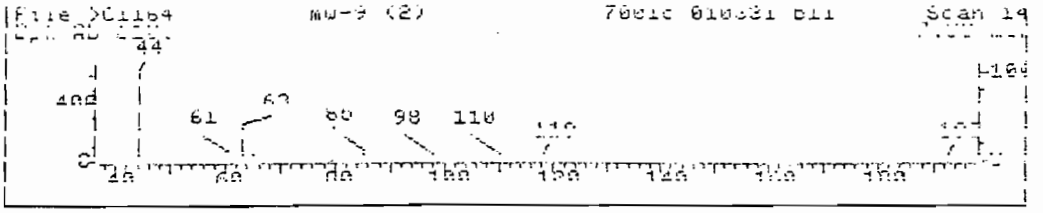
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



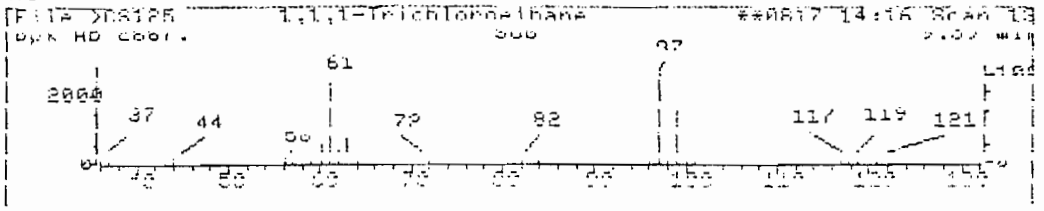
SAMPLE SPECTRUM (UNALTERED)



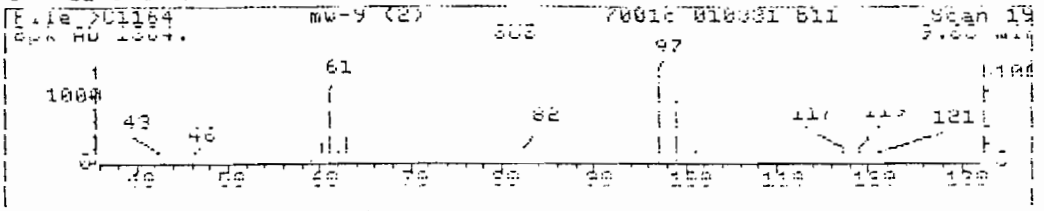
Data File: >C1164::03 Quant Output File: ^C1164::QT
Name: mw-9 (2) Instrument ID: >n01 C
Misc: 7001c 010331 b11
Quant Time: 010406 16:19 Quant ID File: [illegible]
Injected at: **0406 15:51 Last Calibration: [illegible]
Last Qcal Time: **0406 09:53

Compound No : 14
Compound Name : 1,1-Dichloroethane
Scan Number : 148
Retention Time: 2.80 min.
Quant Ion : 63.0
Area : 394.4
Concentration : 4.07 UG
q-value : 73

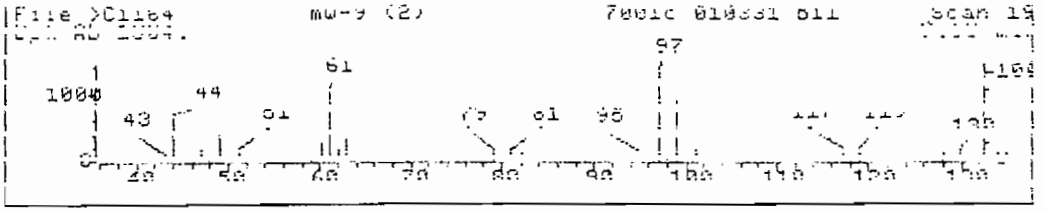
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >C1164::03
Name: mw-9 (2)
Misc: 7001c 010331 b11
Quant Time: 010406 16:15
Injected at: **0406 15:51
Last Qcal Time: **0406 09:53

Quant Output File: ^C1164::QT
Instrument ID: 7001 1.

Quant ID File: 0A91C::MT
Last Calibration: 000410 08:21

Compound No : 23
Compound Name : 1,1,1-Trichloroetha..e
Scan Number : 198
Retention Time: 9.60 min.
Quant Ion : 97.0
Area : 191.1
Concentration : 14.81 UG
q-value : 98

Rn data file beamer from : >L1164::D5

Sample: mw-9 (2) Operator: MANAGER SUPER GRP. 4/DA D1 1>:>1
Misc : 2DDic D1D331 bil
Sys. #: 1 MS model: 20 Sw/Hw rev.: LF Rich # : 0 Equip ID: 2DD1 C
Method file: METHD3 Tuning file: MTYDD3 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	2>D.	2>D.	0.	0.
Chromatographic times, min. :	3.0	33.0	3>.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0

>1.1164 mw-9 (2) 2DDic D1D331 bil
40.01 25D.0 LLP 11C
Upslope: .2DDD Area Reject: 22174. Max Peaks: 8 Bunch: -1 Valley >DDD %
Unslope: 0.DDDD Results File 1CJ164 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	3.26	15	22	>7	168894	3984127	>942>57	1DD.DD	88.D>
2	5.82	8D	93	96	3115	28956	34714	.87	.764
3	14.56	327	33D	>>6	8114	69>48	4>766	1.2D	1.D>
4	17.32	4D2	412	423	19>14	226>D3	184>32	4.17	>.671
5	19.77	475	48D	483	4>>4	64736	25>82	.64	.5>>
6	21.65	522	532	539	2882	164>44	>89D8	.99	.871
7	22.15	542	>46	>>D	39432	264720	165>>8	4.19	3.6>
8	22.55	555	557	562	4>6D	270715	58692	1.49	1.>1D

Sum of corrected areas: 44762>9.

Summary of Unknowns PBM Library Search and Quantitation

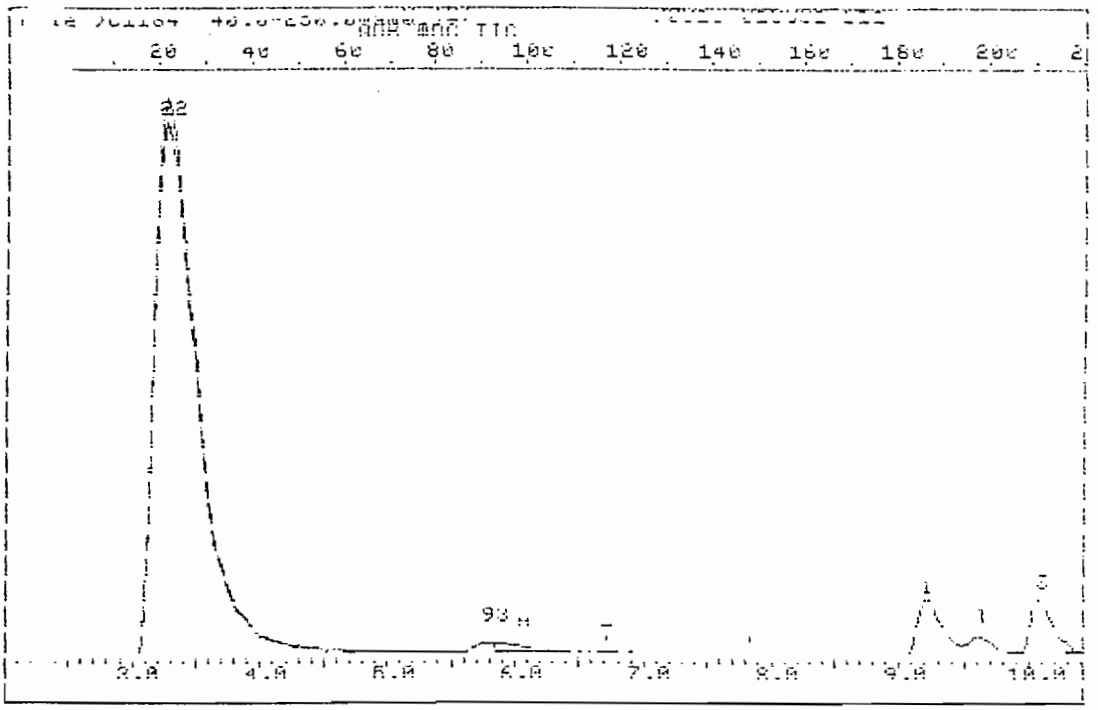
Standard	Concentration	Area	Retention Time	Unknown Window
1	5D.D	221742.	9.17	2.5D - 9.9D
2	5D.D	4649>8.	1D.65	9.9> - 1>.41
3	5D.D	672719.	16.17	1>.41 - 22.84

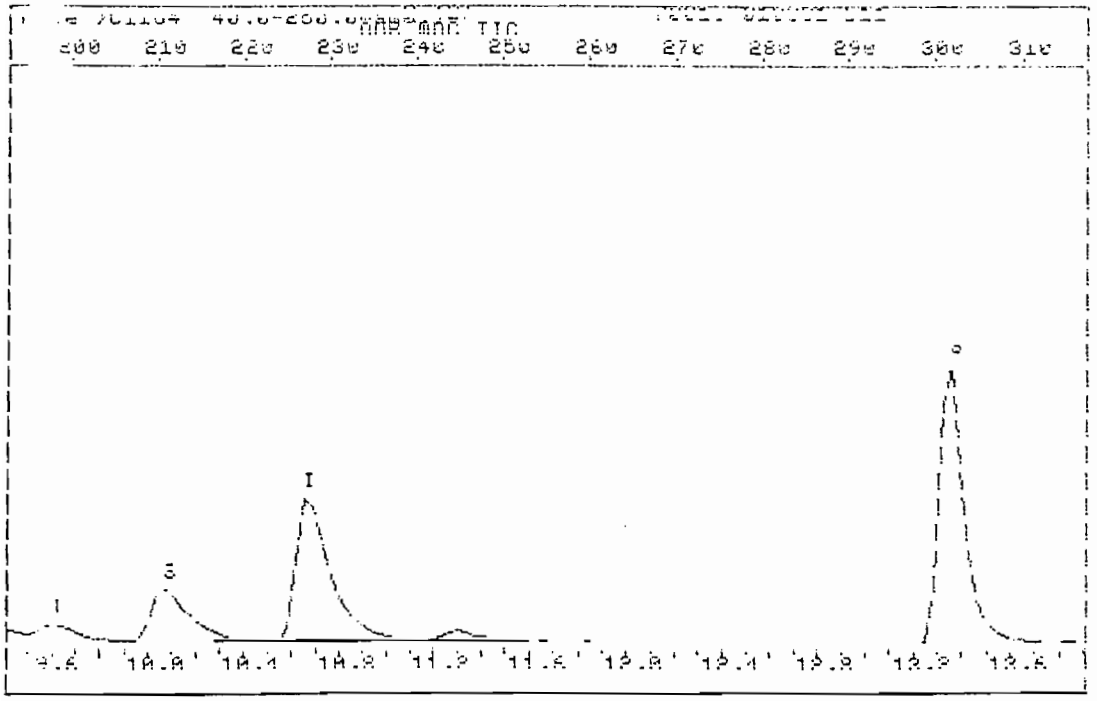
Dilution Factor = 1.DD This sample was DDDD.DD g or m

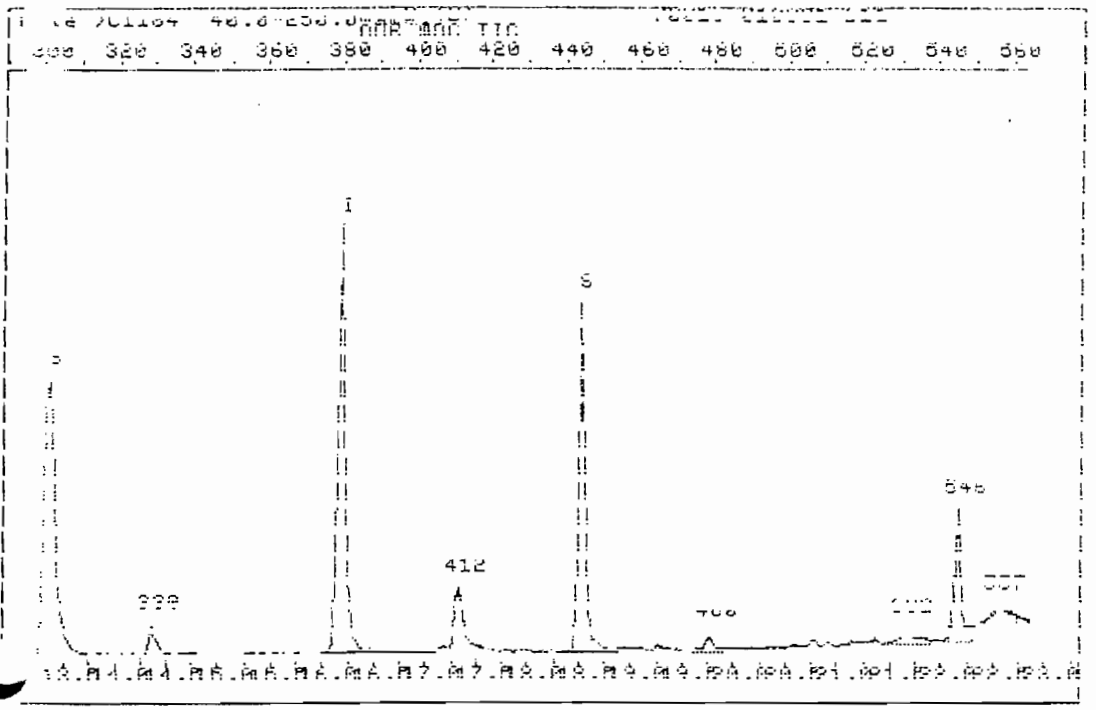
Correction Factor = 1.DD

Unknown Concentration = (Conc Int Std * Area Unknown) / (Area Int Std) * Correction Factor

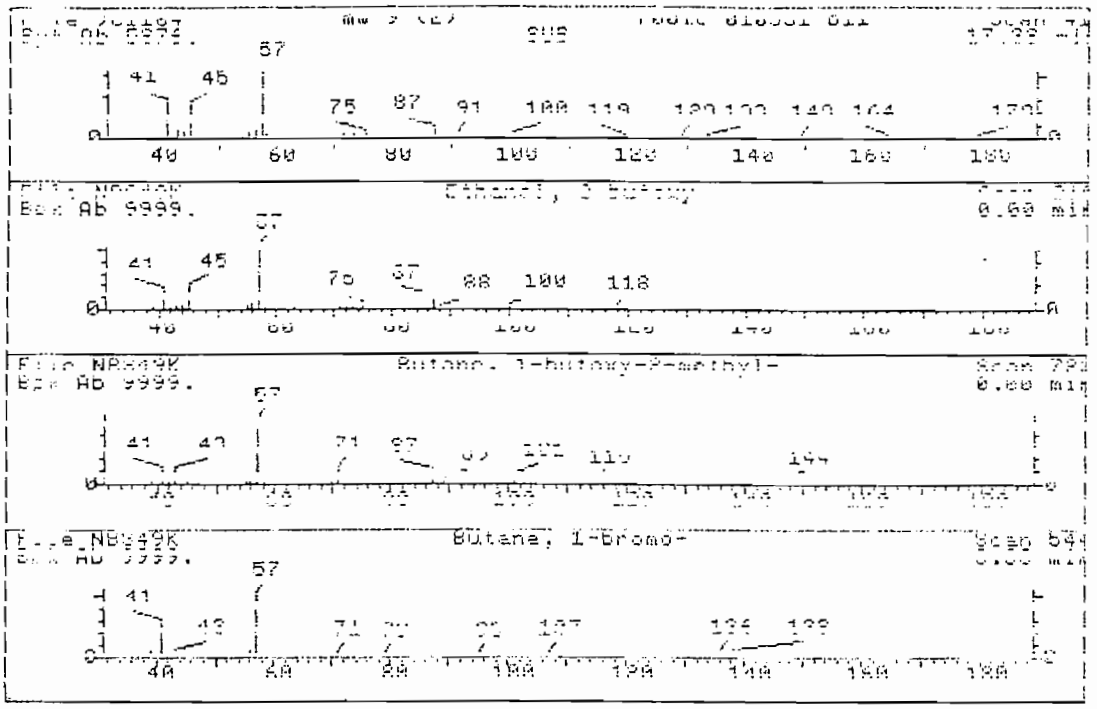
5:4D PM MDN., 2> APR., 2DD1


TIC
20
40
60
80
100
120
140
160
180
200
93
3


TIC
200
210
220
230
240
250
260
270
280
290
300
310
I
3



Instrument ID: 7111 Analyzed on: 4/16/01 15:51



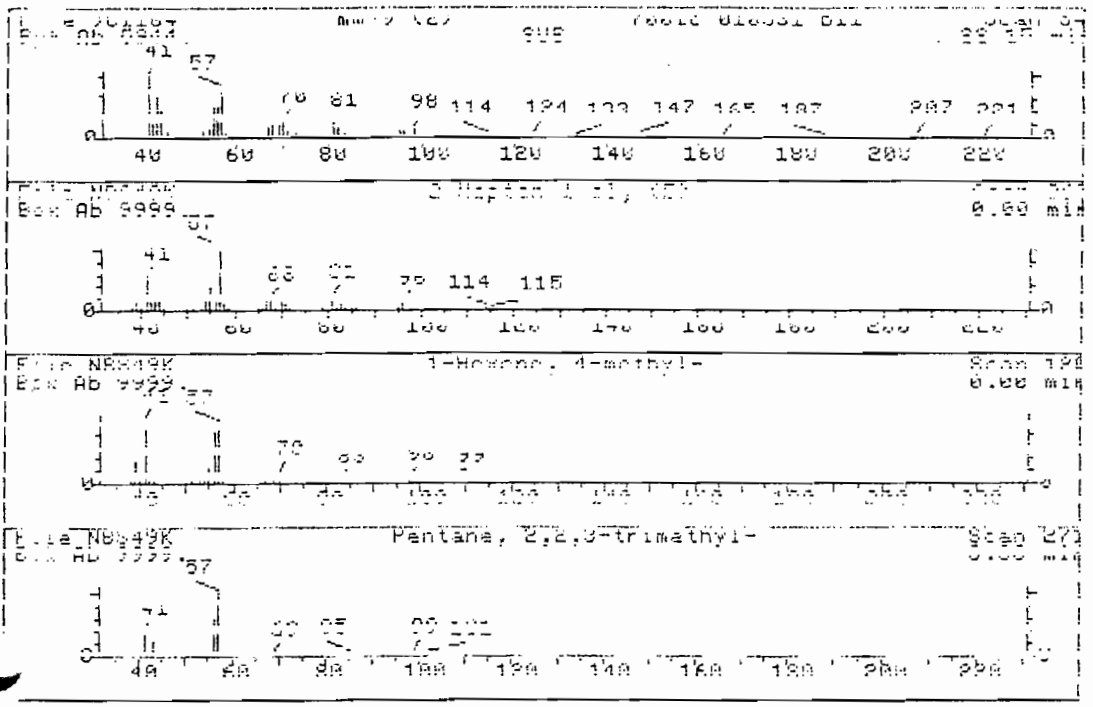
oxygenated

Instrument ID: 7011 Analyzed on: 4/18/01 15:51
Result 5 in PRM results file: LC1164
Retention Time: 17.32 Area: 164332 Tentative Conc: 12.00
The unknown area is 24.43% of the nearest internal standard

1. Ethanol, 2-butoxy- 118 C6H14O2
2. Butane, 1-butoxy-2-methyl- 144 C9H20O
3. Butane, 1-bromo- 136 C4H9Br

Sample file: >C1164 Spectrum #: 412
Search speed: 1 Tilting option: N No. of ion ranges searched: 49

	Prob.	CAS #	CON #	ROOT	K	UK	#FLG	TILT	%	MIN	C	I	R	U
1.	71	111762	7269	NBS49K	55	32	0	0	80	14	38	39		
2.	35	62238033	7352	NBS49K	39	48	2	0	99	28	14	7		
3.	26	109659	1267	NBS49K	36	46	2	0	100	48	10	10		



Unknown

Instrument ID: 7000 Analyzed on: 4/16/01 15:51
Result 4 in PBM results file: CC1164
Retention Time: 22.15 Area: 165138 Tentative Conc: 12.00
The unknown area is 24.55% of the nearest internal standard

1.	2-Hepten-1-ol, (E)-	114 C7H14O
2.	1-Hexene, 4-methyl-	98 C7H14
3.	Pentane, 2,2,3-trimethyl-	114 C8H18
4.	2-Hepten-1-ol, (Z)-	114 C7H14O
5.	Pentane, 3-ethyl-2,2-dimethyl-	128 C9H20
6.	Oxirane, 2-ethyl-3-propyl-, cis-	114 C7H14O

Sample file: >C1164 Spectrum #: 54n
Search speed: 1 Tuning option: N No. of ion ranges searched: 11

	Prob.	CAS #	CON #	Root	K	DK	#Hits	Tie	%	Con	C	R	IV
1.	36*	3346764	842	NBS49K	52	53	2	0	79	44	12		17
2.	27*	3769231	1042	NBS49K	21	75	0	0	56	44	8		15
3.	25	564023	1093	NBS49K	29	46	0	0	79	46	7		9
4.	25*	56454223	855	NBS49K	31	78	2	0	61	48	7		14
5.	24	16747223	1119	NBS49K	25	54	0	0	55	44	8		7
6.	20*	56052949	4950	NBS49K	52	58	3	0	79	55	5		15

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: DUP033001
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1167
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	3.	BJ
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	4.	J
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	51.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	430.	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

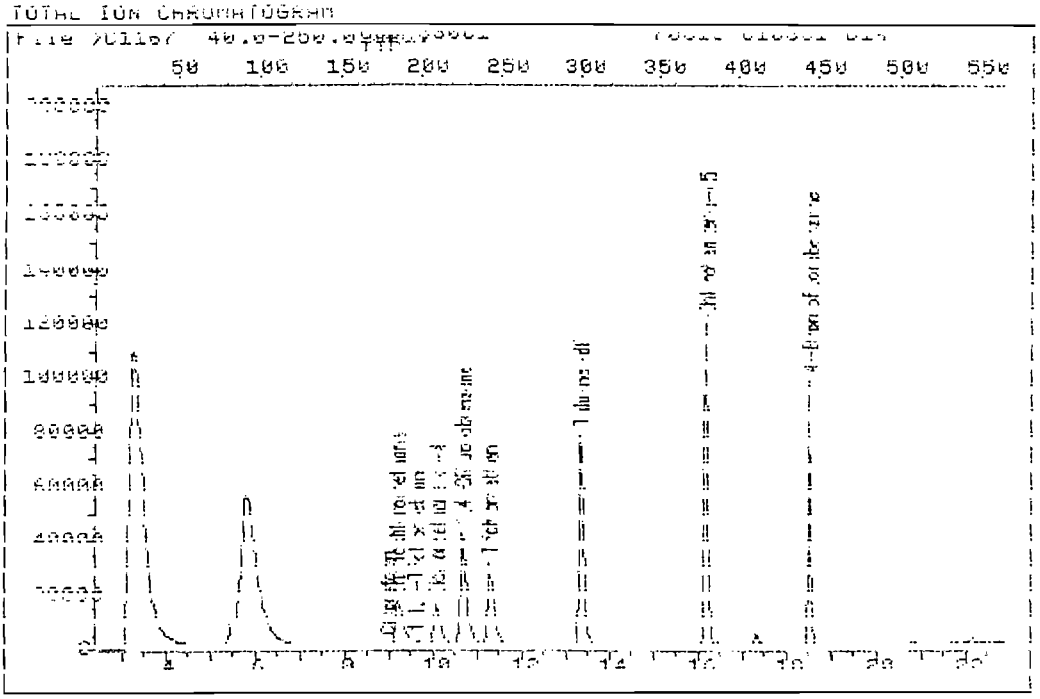
DUP

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: DUP033001
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1167
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

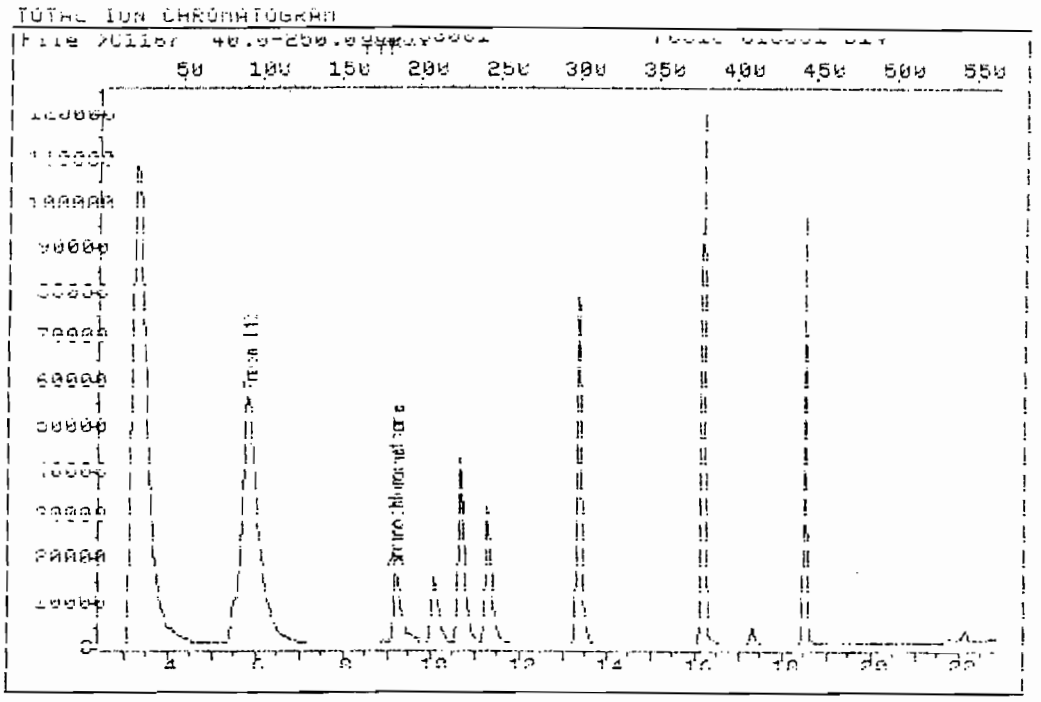
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					



Data File: >C1167::03 Quant Output File: >C1167::QT
Name: dup 33001 Instrument ID: >001 L
Misc: 7001c 010331 b14

Id File: 10591[.::MT
Title: HP 00A Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Local Time: **0406 09:[illegible]

Operator ID: MANAGER
Quant Time : 010406 17:[illegible]
Injected at: **0406 17:19



Data File: >C1167::03
Name: dup 33001
Misc: 7001c 010331 b14

Id File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: :

Operator ID: MANAGER
Quant Time : 010423 14:1..
Injected at: **0406 17:19

Quant Output File: 'C1167::Q1
Instrument ID: 7001 1.

Last Qual Time: **..-06 19:2

Operator ID: MANAGER Quant Rev: 7 Quant Time: 011486 17:45
Output File: ^C1167::QT Injected at: **1486 17:19
Data File: >C1167::03 Dilution Factor: 1.000000
Name: dup 33001 Instrument ID: 7001 C
Misc: 7001c 010331 bl4

Lb File: ID591C::MT
Title: HP VOA Continuing Calibration Standa n
Last Calibration: 000810 08:31 Last Qcal Time: **1486 09:53

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.18	128.0	17284	50.00	ug	91
18)	Chloroform	8.96	83.0	5049	3.18	UG	96
19)	1,2-Dichloroethane-d4	10.08	65.0	20868	48.31	ug	97
22)	*1,4-Difluorobenzene	10.66	114.0	172800	50.00	UG	94
23)	1,1,1-Trichloroethane	9.61	97.0	5052	4.05	ug	99
29)	Trichloroethene	11.27	130.0	35885	50.90	UG	9
36)	*Chlorobenzene-d5	16.17	117.0	142131	50.00	ug	
42)	Toluene d-8	13.32	98.0	182210	51.96	UG	98
48)	Bromofluorobenzene	18.51	95.0	79822	48.53	ug	97

* Compound is ISTD

QUANT REPORT Page 1

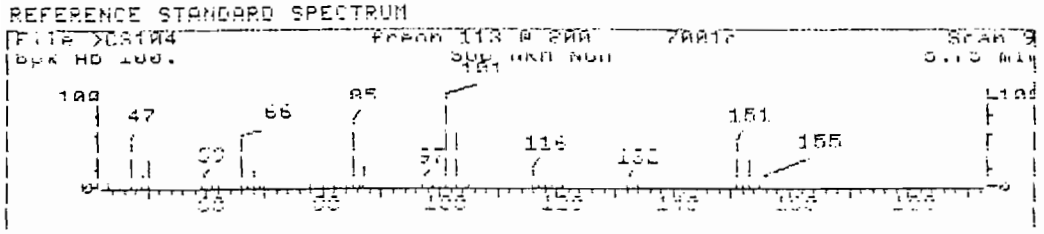
Operator ID: MANAGER Quant Rev: 7 Quant Time: 011-23 14:11
Output File: 'C1167::QT Injected at: **1406 17:19
Data File: >C1167::03 Dilution Factor: 1.000000
Name: dup 33001 Instrument ID: 7001 C
Misc: 7001c 011331 b14

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **1406 15:22

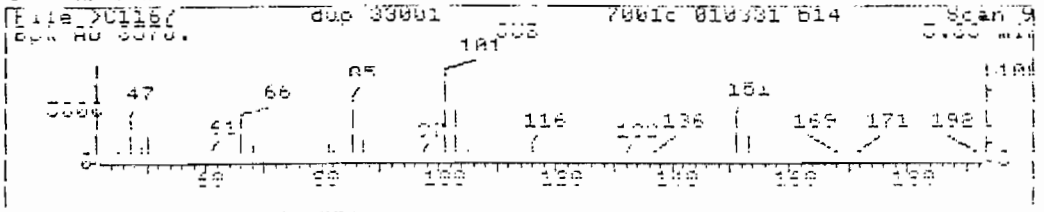
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.18	128.0	1733?	50.00	ng	??
2)	Freon 113	5.83	101.0	216739	434.13	UG	96

* Compound is ISTD

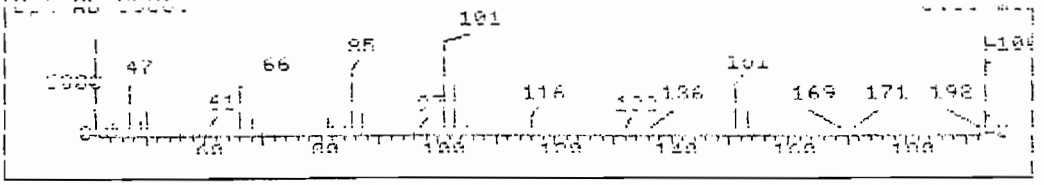
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

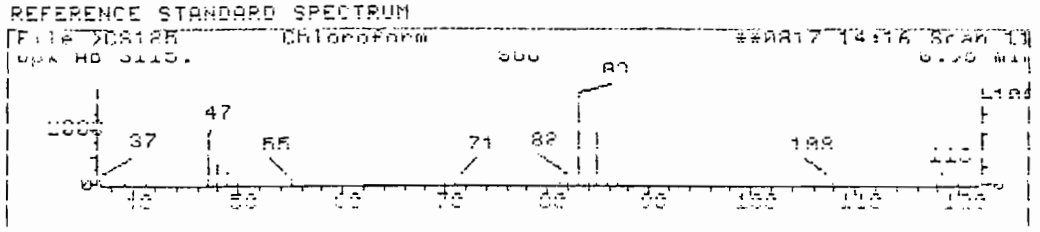


Data File: >C1167::03
Name: dup 33001
Misc: 7001c 010331 b14
Quant Time: 010423 14:00
Injected at: **0406 17:19
Last Qcal Time: **0406 15:22

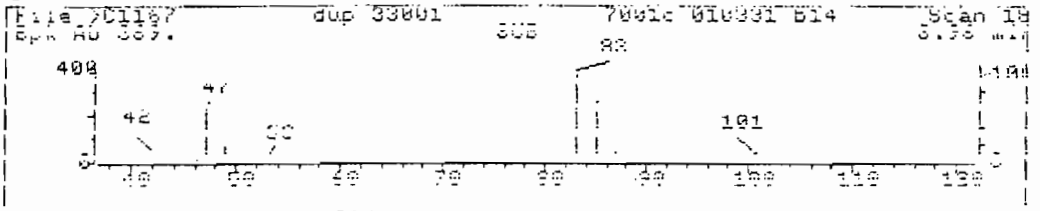
Quant Output File: 'C1167::Q1
Instrument ID: 7001 L
Quant ID File: ID:113::1
Last Calibration: :

Compound No : 2
Compound Name : Freon 1
Scan Number : 93
Retention Time: 5.83 min.
Quant Ion : 101.0
Area : 21675
Concentration : 454.13 UG
q-value : 96

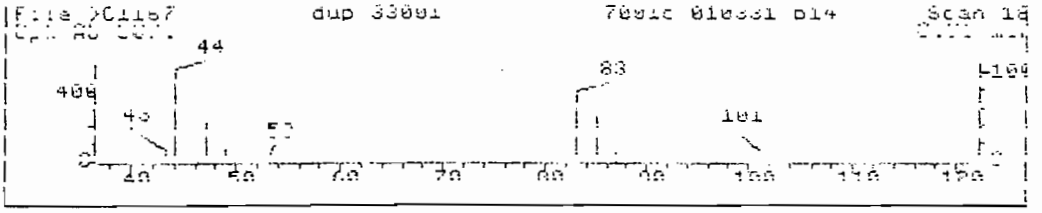
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

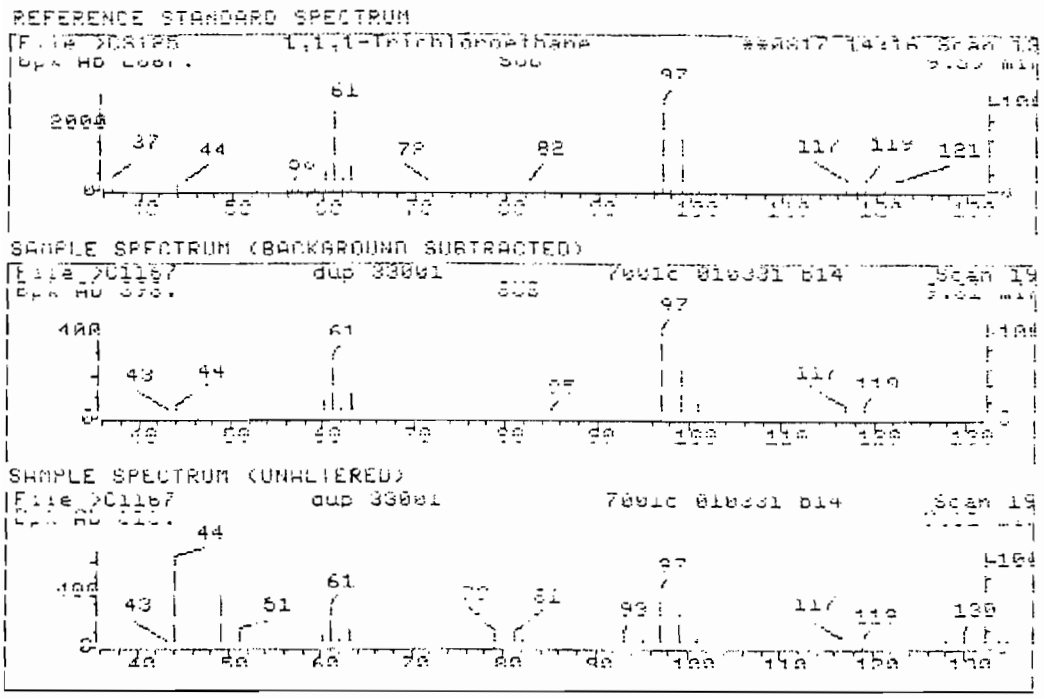


Data File: >C1167::03
Name: dup 33001
Misc: 7001c 010331 b14
Quant Time: 010406 17:43
Injected at: **0406 17:19
Last Qcal Time: **0406 09:53

Quant Output File: >C1167::QT
Instrument ID: >001 L

Quant ID File: [illegible]
Last Calibration: [illegible]

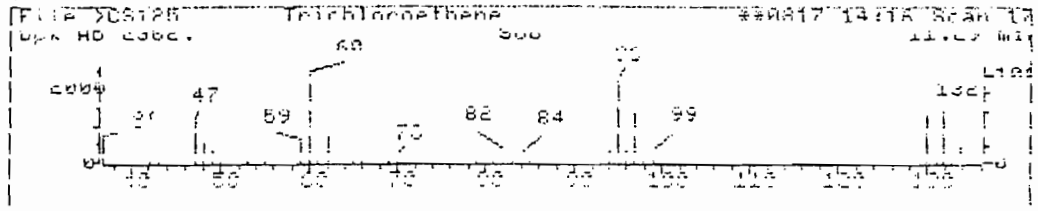
Compound No : 18
Compound Name : Chloroform
Scan Number : 1811
Retention Time: 8.96 min.
Quant Ion : 83.0
Area : [illegible]
Concentration : 3.18 UG
q-value : 96



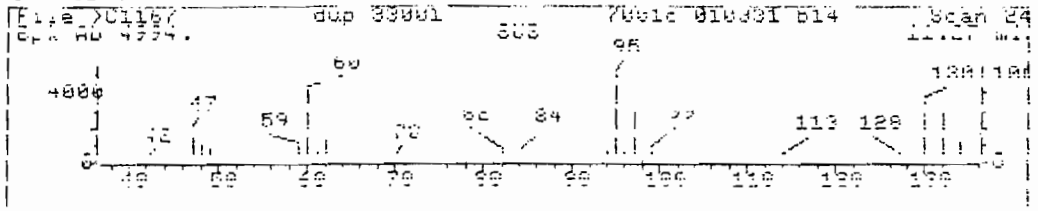
Data File: >C1167::03 Quant Output File: ^C1167::QT
Name: dup 33001 Instrument ID: >001 C
Misc: 7001c 010331 b14
Quant Time: 010406 17:43 Quant ID File: I:>91C::QT
Injected at: **0406 17:19 Last Calibration: 000810 08:31
Last Qcal Time: **0406 09:53

Compound No : 23
Compound Name : 1,1,1-Trichloroethane
Scan Number : 198
Retention Time: 9.61 min.
Quant Ion : 97.0
Area : 50??
Concentration : 4.05 UG
q-value : 85

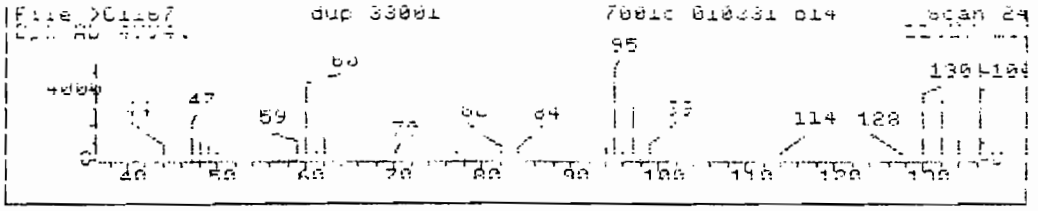
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNFILTERED)



Data File: >C1167::03 Quant Output File: ^C1167::QT
Name: dup 33001 Instrument ID: /001 L
Misc: 7001c 010531 b14
Quant Time: 010406 17:43 Quant ID File: [...]91C.::QT
Injected at: **0406 17:19 Last Calibration: 000810 08:31
Last Qcal Time: **0406 09:53

Compound No : 29
Compound Name : Trichloroethene
Scan Number : 244
Retention Time: 11.27 min.
Quant Ion : 130.0
Area : 358[illegible]
Concentration : 50.90 UG
q-value : 93

MS data file header from : >C:167::03

Sample: dup 33001 Operator: MANAGER SUPER GRP. 4/08/91 17:17
Misc : 7001c 010331 b14
Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7001 C
Method file: MEI403 Tuning file: MI9103 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures : 45. 250. 250. 0. 0.
Chromatographic times, min. : 3.0 39.0 39.0 0.0 0.0
Chromatographic rate, deg/min: 8.0 .1 0.0 .2 0.0

>C:167 dup 33001 7001c 010331 b14
40.01 250.0 CLP ITC
Upslope: .2000 Area Reject: 24655. Max Peaks: 3 Bunch: -1 Valley 100 %
Unslope: 0.0000 Results File IC:167 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	3.27	14	22	59	109155	2661223	2629490	100.00	62.7
2	5.79	79	92	126	55920	1639329	1586688	59.18	39.
3	17.32	406	412	422	5202	77755	45715	1.74	1.1

Sum of corrected areas: 4179291.

Summary of Unknowns PBM Library Search and Quantitation

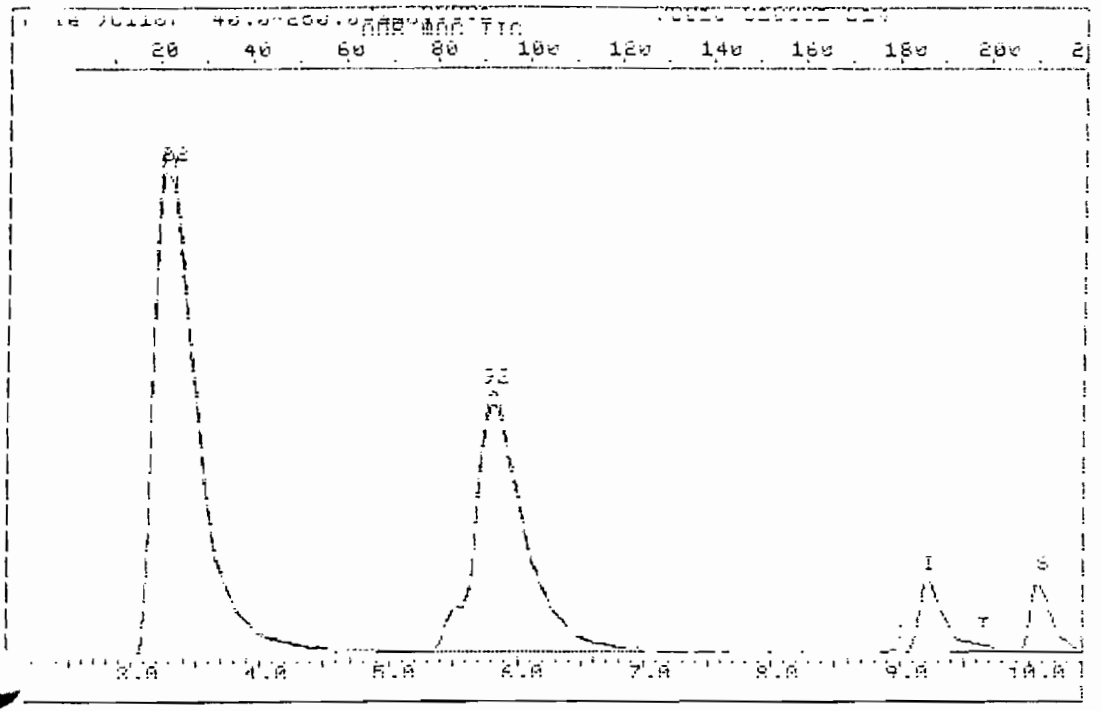
Standard	Concentration	Area	Retention time	Unknown Window
1	50.0	2481551.	9.18	7.91 - 9.91
2	50.0	4572395.	10.66	9.92 - 13.41
3	50.0	617212.	16.17	13.41 - 21.64

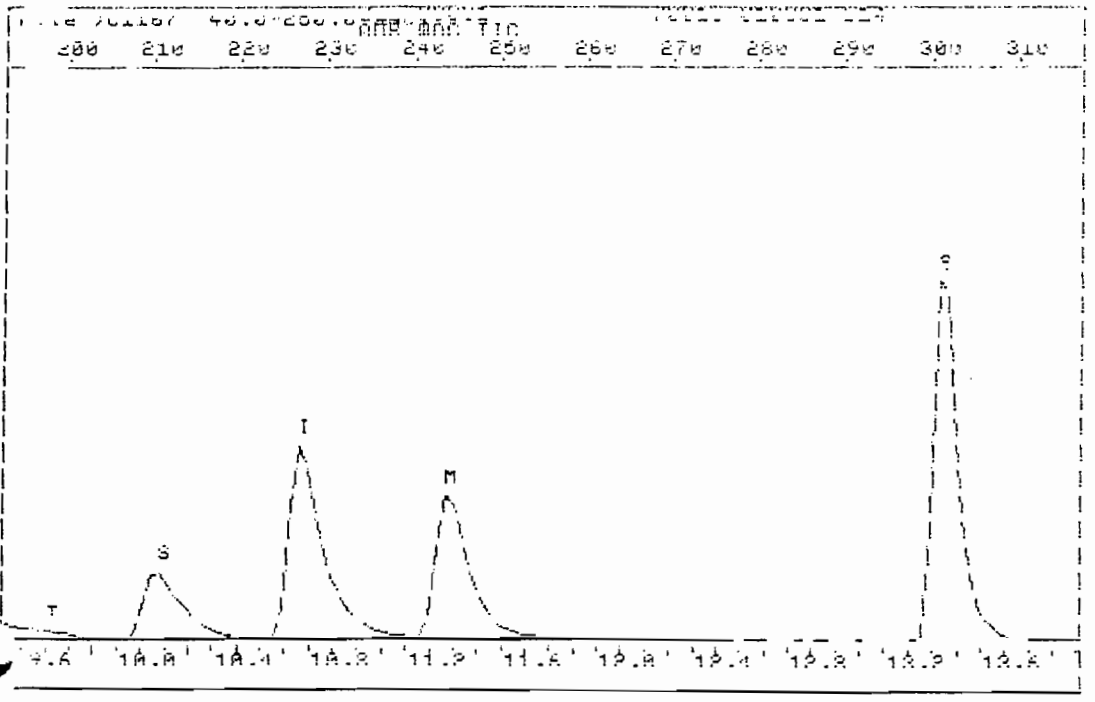
Dilution Factor = 1.00 This sample was 1000.00 g or mL

Correction Factor = 1.00

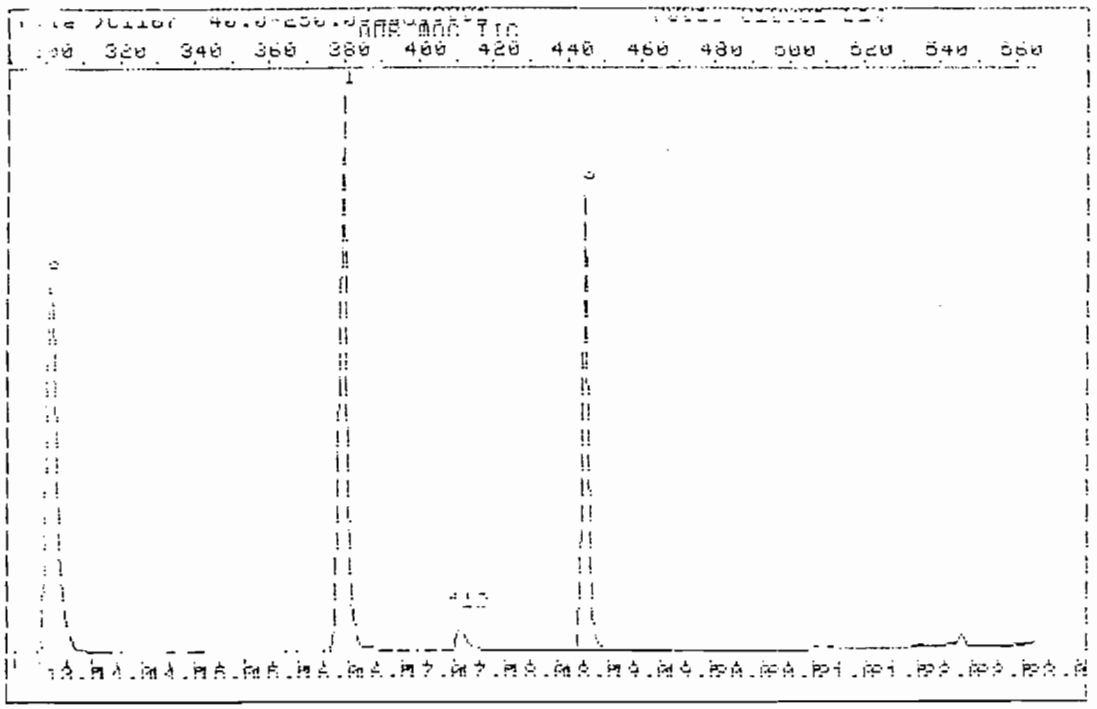
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

6:30 PM MON., 23 APR., 2001





Instrument ID: ZIII1 Analyzed on: 4/16/11 17:19



Instrument ID: 7001 Analyzed on: 4/10/01 17:19

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

DUP DL

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: DUP033001 DL
Sample wt/vol: 1.000 (g/mL) ML Lab File ID: C1178
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/07/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50.	U
74-83-9	Bromomethane	50.	U
75-01-4	Vinyl Chloride	50.	U
75-00-3	Chloroethane	50.	U
75-09-2	Methylene Chloride	25.	U
67-64-1	Acetone	50.	U
75-15-0	Carbon Disulfide	25.	U
75-35-4	1,1-Dichloroethene	25.	U
75-34-3	1,1-Dichloroethane	25.	U
156-60-5	1,2-Dichloroethene-trans	25.	U
67-66-3	Chloroform	12.	BJ
107-06-2	1,2-Dichloroethane	25.	U
78-93-3	2-Butanone	50.	U
71-55-6	1,1,1-Trichloroethane	25.	U
56-23-5	Carbon Tetrachloride	25.	U
75-27-4	Bromodichloromethane	25.	U
78-87-5	1,2-Dichloropropane	25.	U
10061-01-5	cis-1,3-Dichloropropene	25.	U
79-01-6	Trichloroethene	52.	
124-48-1	Dibromochloromethane	25.	U
79-00-5	1,1,2-Trichloroethane	25.	U
71-43-2	Benzene	25.	U
10061-02-6	trans-1,3-Dichloropropene	25.	U
75-25-2	Bromoform	25.	U
108-10-1	4-Methyl-2-Pentanone	50.	U
591-78-6	2-Hexanone	50.	U
127-18-4	Tetrachloroethene	25.	U
79-34-5	1,1,2,2-Tetrachloroethane	25.	U
108-88-3	Toluene	25.	U
108-90-7	Chlorobenzene	25.	U
100-41-4	Ethylbenzene	25.	U
100-42-5	Styrene	25.	U
156-59-2	1,2-Dichloroethene-cis	25.	U
106-42-3	m,p-Xylenes	25.	U
95-47-6	o-Xylene	25.	U
76-13-1	Freon 113	410.	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

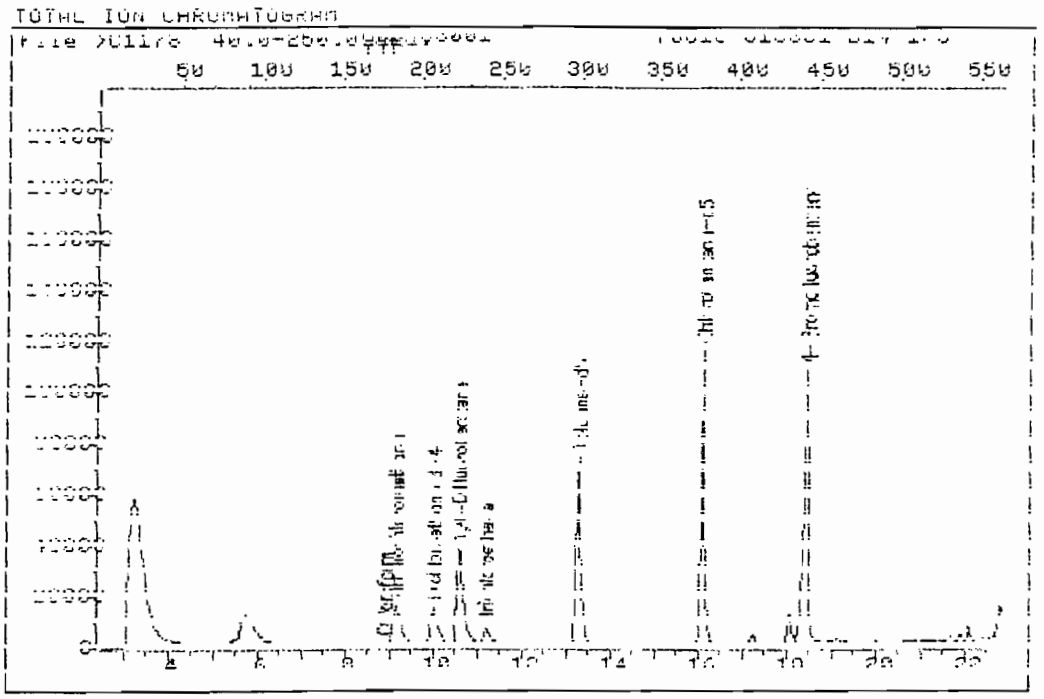
DUP DL

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: DUP033001 DL
Sample wt/vol: 1.000 (g/mL) ML Lab File ID: C1178
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/07/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

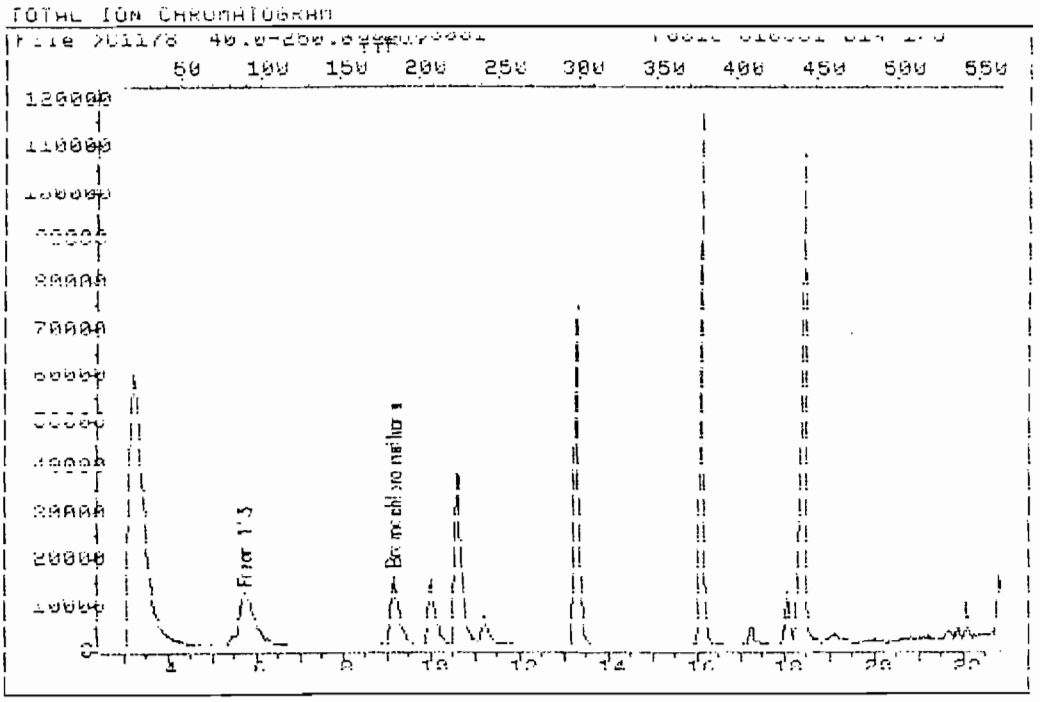
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	18.08	40.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					



Data File: >C:\78::03 Quant Output File: >C:\78::QT
Name: oup 35001 Instrument ID: .001 C
Misc: 7001c 010331 b14 1/5

Id File: IDS91C::MT
Title: HP 00A Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Qcal Time: **0407 11:44

Operator ID: MANAGER
Quant Time : 010407 14:1>
Injected at: **0407 13:41



Data File: >C1178::03
Name: dup 33001
Misc: 7001c 010331 b14 1/5

Quant Output File: 'C1178::QT
Instrument ID: 7001 C

Id File: IDF113::M1
Title: Freon 113 ID File
Last Calibration: :

Last Qcal Time: **-**7 1:-4

Operator ID: MANAGER
Quant Time : 010423 11:5m
Injected at: **0407 13:41

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 010497 14:19
Output File: ^C1178::QT Injected at: **0407 13:41
Data File: >C1178::03 Dilution Factor: 1.00000
Name: dup 33001 Instrument ID: 7001 C
Misc: 7001c 010531 b14 1/5

ID File: ID591C::MT
Title: HP VOA Continuing Calibration Standa n
Last Calibration: 000810 08:31 Last Qcal Time: **0407 11:44

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.14	128.0	16914	50.00	ug	99
18)	Chloroform	8.89	83.0	3622	2.58	UG	98
19)	1,2-Dichloroethane-d4	10.01	65.0	67423	45.13	ug	97
22)	*1,4-Difluorobenzene	10.58	114.0	118273	50.00	UG	95
29)	Trichloroethene	11.20	130.0	6930	10.42	ug	91
36)	*Chlorobenzene-d5	16.10	117.0	134900	50.00	UG	94
42)	Toluene d-8	13.29	98.0	169824	49.15	ug	97
48)	Bromofluorobenzene	18.44	95.0	28983	51.76	UG	84

* Compound is ISTD

QUANT REPORT Page 1

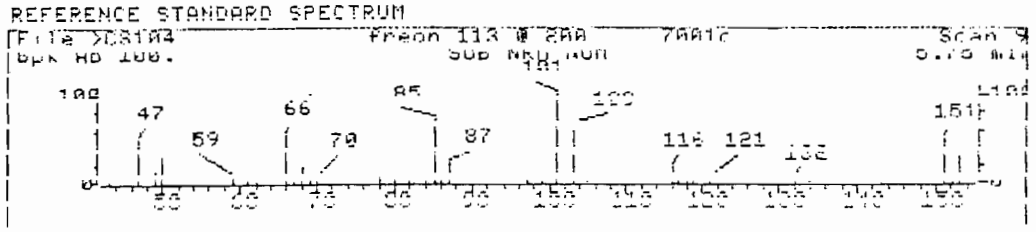
Operator ID: MANAGER Quant Rev: 7 Quant Time: 01-23 11:5n
Output File: 'C1178::QT Injected at: **0402 13:41
Data File: >C1178::03 Dilution Factor: 1.0000
Name: dup 33001 Instrument ID: 7001 C
Misc: 7001c 010331 b14 1/5

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **0407 11:44

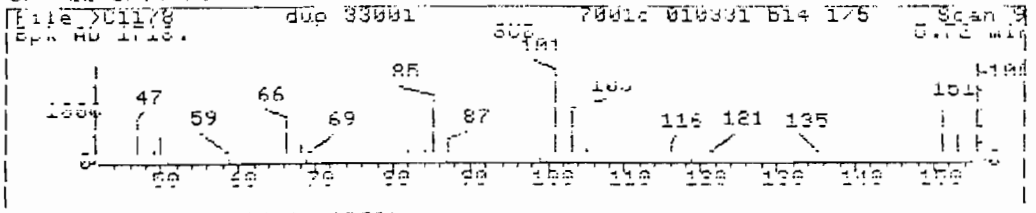
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.14	128.0	16??0	90.00	ng	00
2)	Freon 113	5.72	101.0	4?738	81.88	UG	97

* Compound is ISTD

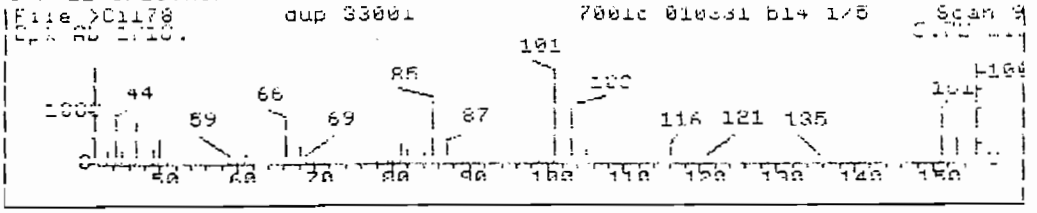
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

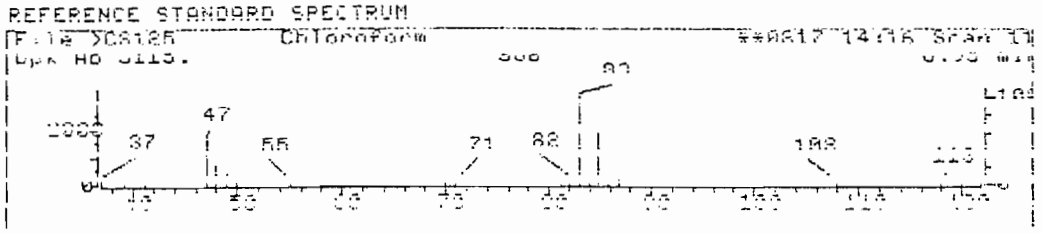


Data File: >C1178::03
Name: dup 33001
Misc: 7001c 010331 b14 1/5
Quant Time: 010423 11:56
Injected at: **0407 13:41
Last Qcal Time: **0407 11:44

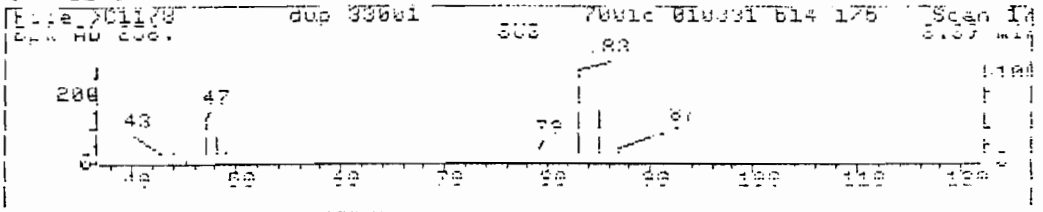
Quant Output File: >C1178::QT
Instrument ID: 7001 1.
Quant ID File: 1/F113::.(
Last Calibration: :

Compound No : 2
Compound Name : Freon 1..
Scan Number : 90
Retention Time: 5.72 min.
Quant Ion : 101.0
Area : 432>M
Concentration : 81.88 UG
q-value : 97

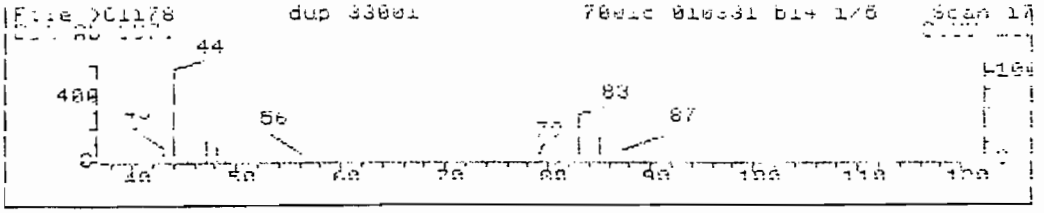
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

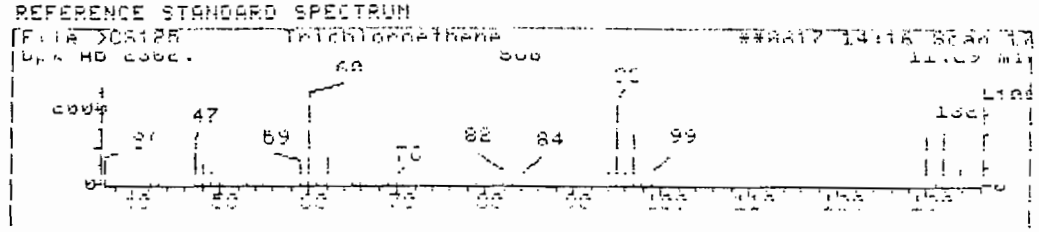


Data File: >C1178::05
Name: dup 33001
Misc: 7001c 010331 b14 1/5
Quant Time: 010407 14:05
Injected at: **0407 13:41
Last Qcal Time: **0407 11:44

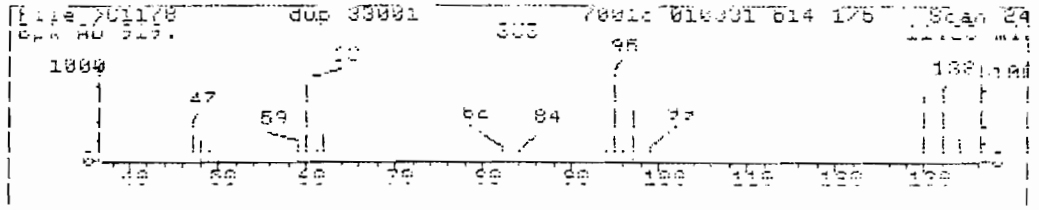
Quant Output File: >C1178::Q1
Instrument ID: 7001 L
Quant ID File: D:\5910\...
Last Calibration: 00MR10 08:51

Compound No : 18
Compound Name : Chloroform
Scan Number : 178
Retention Time: 8.89 min.
Quant Ion : 83.0
Area : 35[illegible]
Concentration : 2.38 UG
q-value : 98

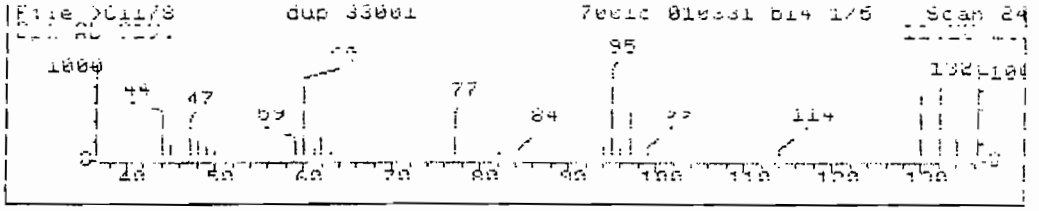
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

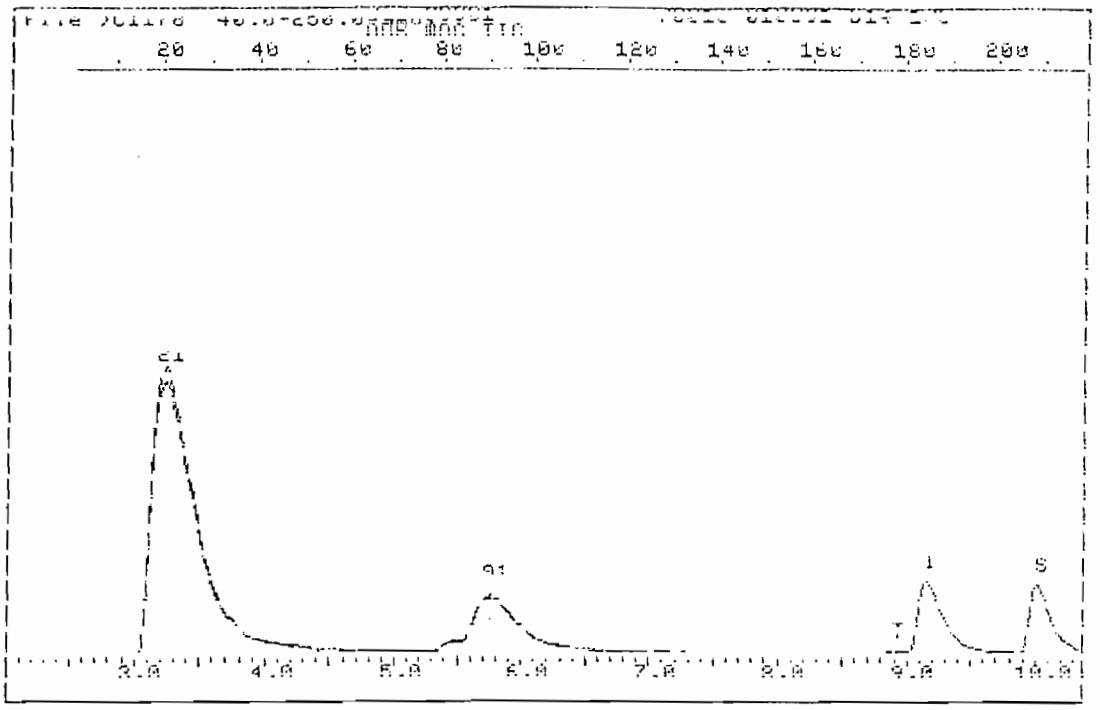


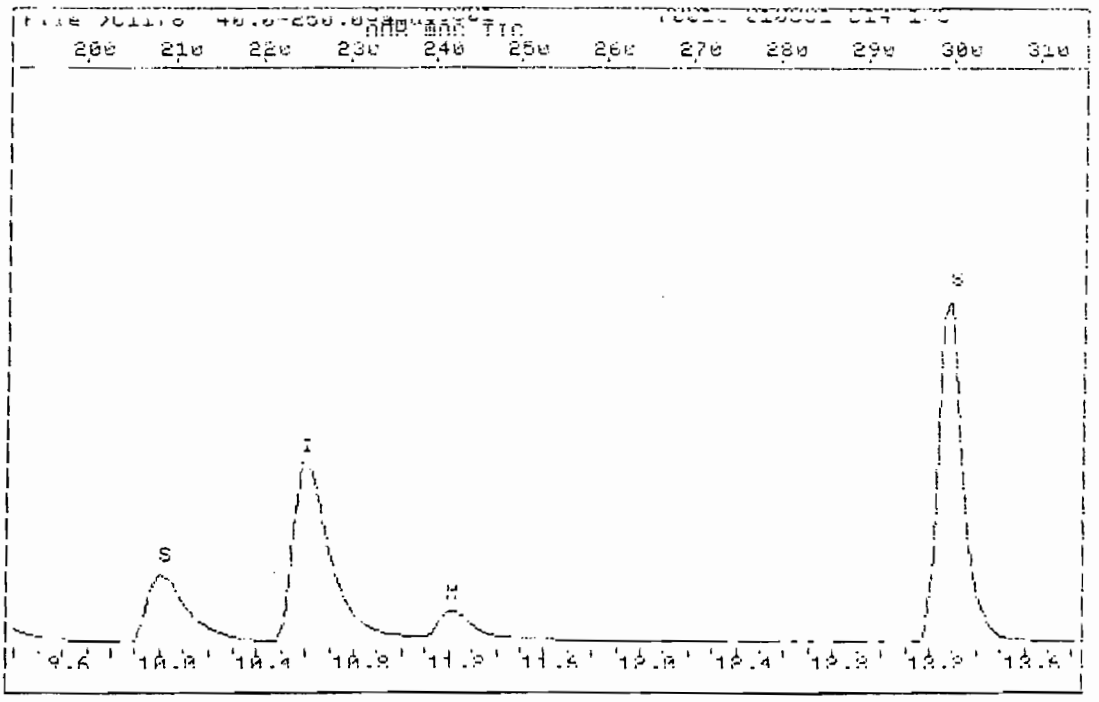
Data File: >C1178::03
Name: dup 33001
Misc: 7001c 010331 b14 1/5
Quant Time: 010407 14:05
Injected at: **0407 13:41
Last Qcal Time: **0407 11:44

Quant Output File: ^C1178::Q1
Instrument ID: >.001 .
Quant ID File: [...]91[.]1 .1
Last Calibration: 0000410 0[illegible]:>[illegible]

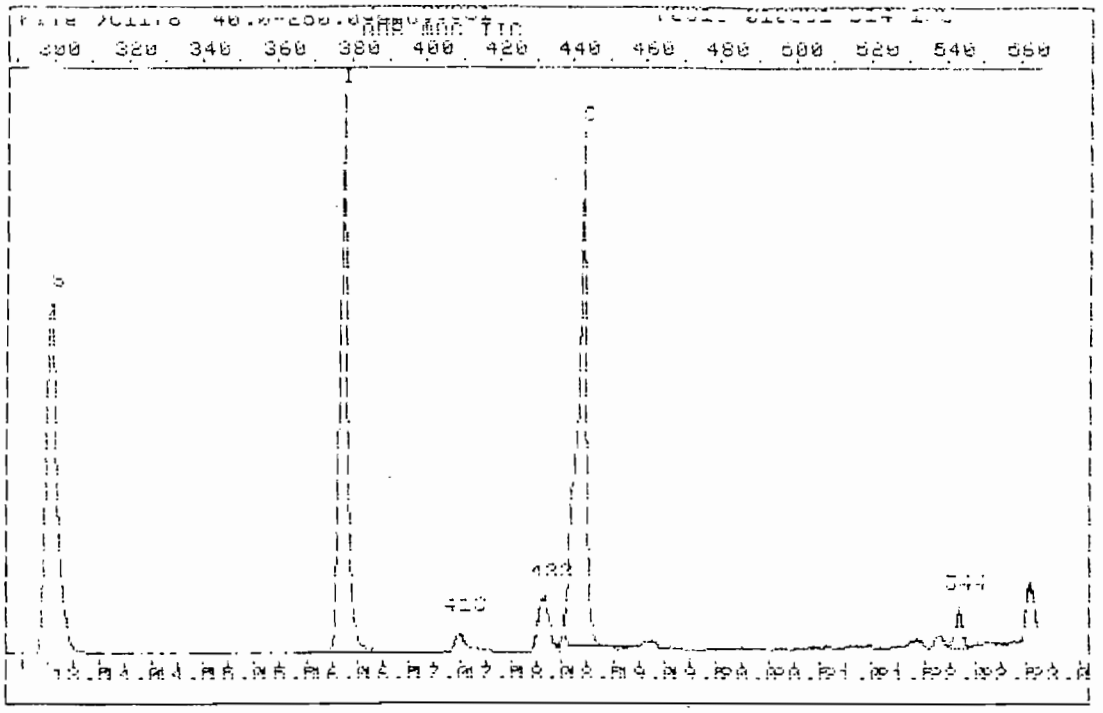
Compound No : 29
Compound Name : Trichloroethene
Scan Number : 24%
Retention Time: 11.20 mi..
Quant Ion : 130.0
Area : 69 .1
Concentration : 10.42 UG
q-value : 98

```
MS data file header from : >C1178::03

Sample: dup 33001              Operator: MANAGER   SUPER GRP.   4/0  01 1>:-1
Misc  : 7001c 010331 b14 1/5
Sys. #:    1  MS model:  70  SW/HW rev.: LF  A/S #:  0    Equip ID: 7001  C
  Method file: METH03    Tuning file: MT9003   No. of extra records:  2
 Source temp.:   N/A  Analyzer temp.:  N/A     Transfer line temp. :   0

      Chromatographic temperatures :  45.   2>0.   2>0.     0.     0.
      Chromatographic times, min.  :   .0    >.0    >.0     .0    >.0
      Chromatographic rate, deg/min:  8.0     .1     0.0     .2    0.0


>C1178        dup 33001           7001c 010>31 b14 1/5
  40.01 250.0 CLP TIC
Unslope:  .2000 Area Reject:   21087. Max Peaks:  5  Bunch: -1 Valley >100 %
Unslope: 0.0000 Results File IC1178   Sorted by Time/Area      INT

Peak    R.T.   first    max    last     peak      raw       corr.     corr.     % of
  #     min.   scan    scan   scan     height    area      area    % max.     total
---   ------  -----   -----  -----    ------   -------   -------  -------   -------
  1     3.23      12      21     54      6008   14/:841   1445051   100.00    75.1-1
  2     5.25      77      91    122     11560    400331    314257   21.75    16.345
  3    17.25     406     410    424      4984     7/664     43-38    >.01     2.2>7
  4    18.08     427     43>    437     11/36    11600     89855    6.22     4.673
  5    22.08     >41     >44    >47      /853    63254     3>-40    2.10     1   1


                        Sum of corrected areas:     1922939.

        Summary of Unknowns PBM Library Search and Quantitation

                                                Retention       Unknown
        Standard    Concentration    Area         Time          Window
        --------    -------------  ---------   ---------   ----------------
           1              50.0      210874.       9.14      2.91 -    9.86
           2              50.0      406>44.      10.58      9.86 -   13.34
           3              50.0      594>96.      16.10      1>.34 -   22.-4

   Dilution Factor =      1.00          This sample was 1000.00  g or mL

 Correction Factor =      1.00

                          |Conc Int Std * Area Unknown|
Unknown Concentration =   |---------------------------| * Correction Factor
                          |       Area Int Std        |

                                        11:10 AM  TUE.,  8  MAY , 2001
```

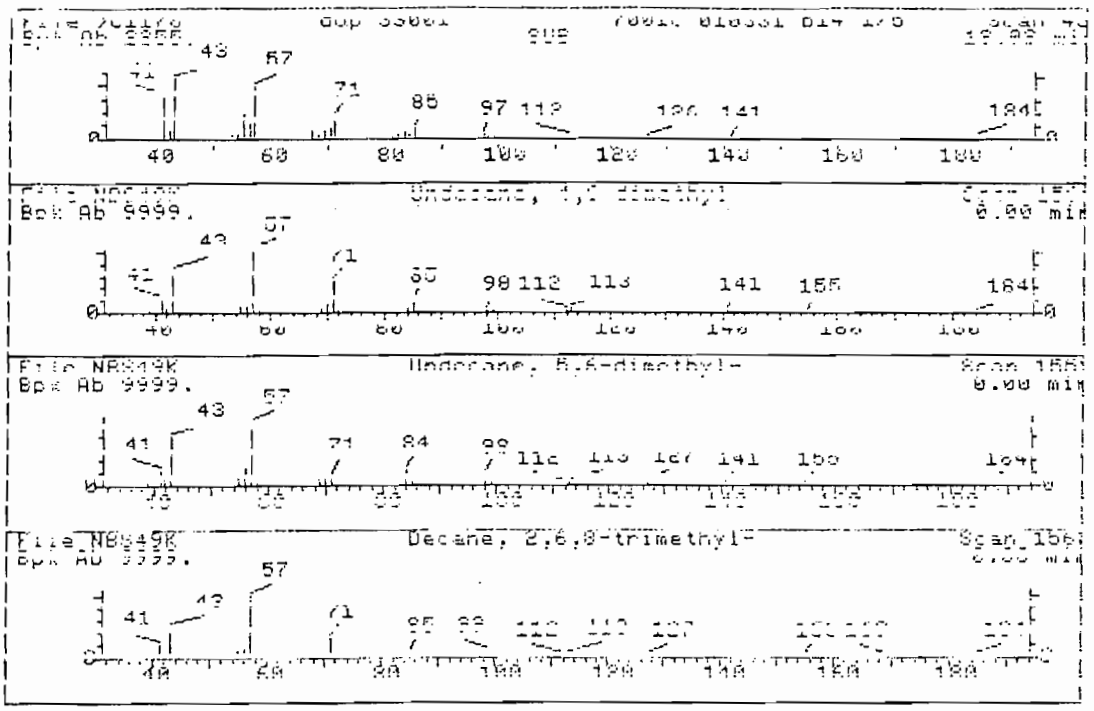




Instrument ID: 7011 Analyzed on: 4/11/01 13:41



Instrument ID: 7000 Analyzed on: 4/11/01 13:41



Instrument ID: 7001 Analyzed on: 4/02/91 13:41
Result 3 in PBM results file: LC1178
Retention Time: 18.08 Area: 89853 Tentative Conc: 8.00
The unknown area is 15.12% of the nearest internal standard

1. Undecane, 4,6-dimethyl- 184 C13H28
2. Undecane, 5,6-dimethyl- 184 C13H28
3. Decane, 2,6,8-trimethyl- 184 C13H28
4. Undecane, 2,4-dimethyl- 184 C13H28
5. Undecane, 3,5-dimethyl- 184 C13H28
6. Nonane, 4-methyl-5-propyl- 184 C13H28

unknown

Sample file: >C1178 Spectrum #: 453
Search speed: 1 Tilting option: N No. of ion ranges searched: 58

	Prob.	CAS #	CON #	ROUT	K	DK	#FIX	TILT	%	CON	C	I	R	IV
1.	60*	17312822	4387	NB549K	44	54	2	0	71	12	30			9
2.	60*	17615917	6443	NB549K	45	61	2	0	82	11	30			15
3.	60*	62108263	4392	NB549K	29	63	2	0	87	14	30			4
4.	60*	17312800	6764	NB549K	28	75	3	0	100	14	30			13
5.	60*	17312811	9853	NB549K	21	77	2	0	87	12	30			3
6.	60*	62185551	12180	NB549K	26	86	3	0	87	15	30			13

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EB

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: EB033001
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1161
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	10.	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

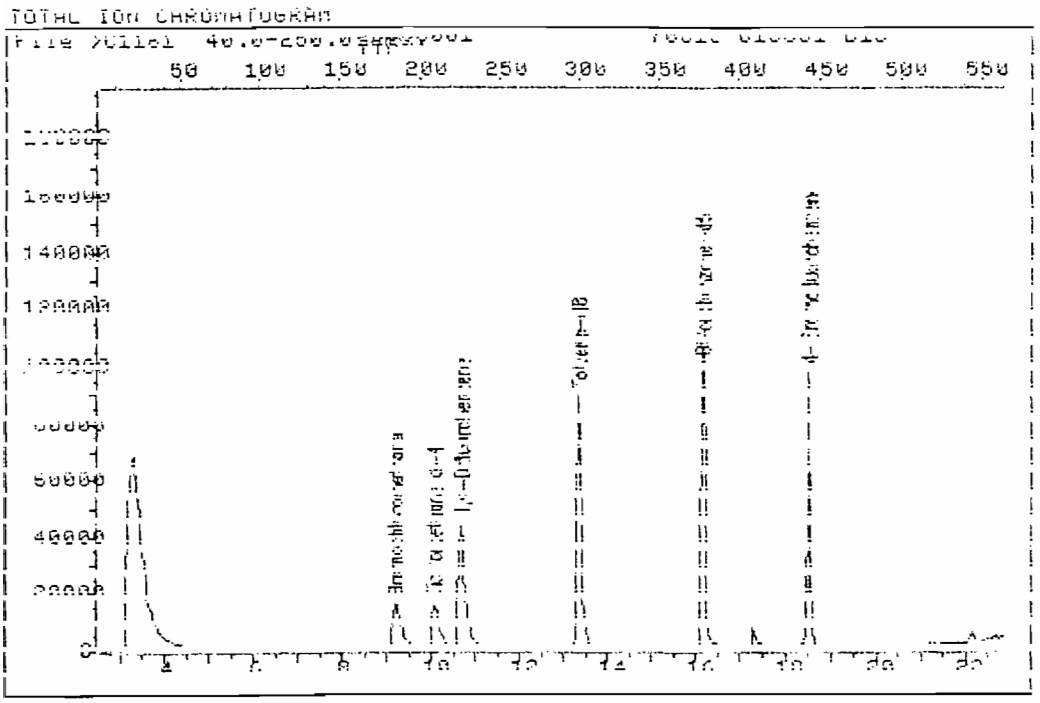
EB

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: EB033001
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1161
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

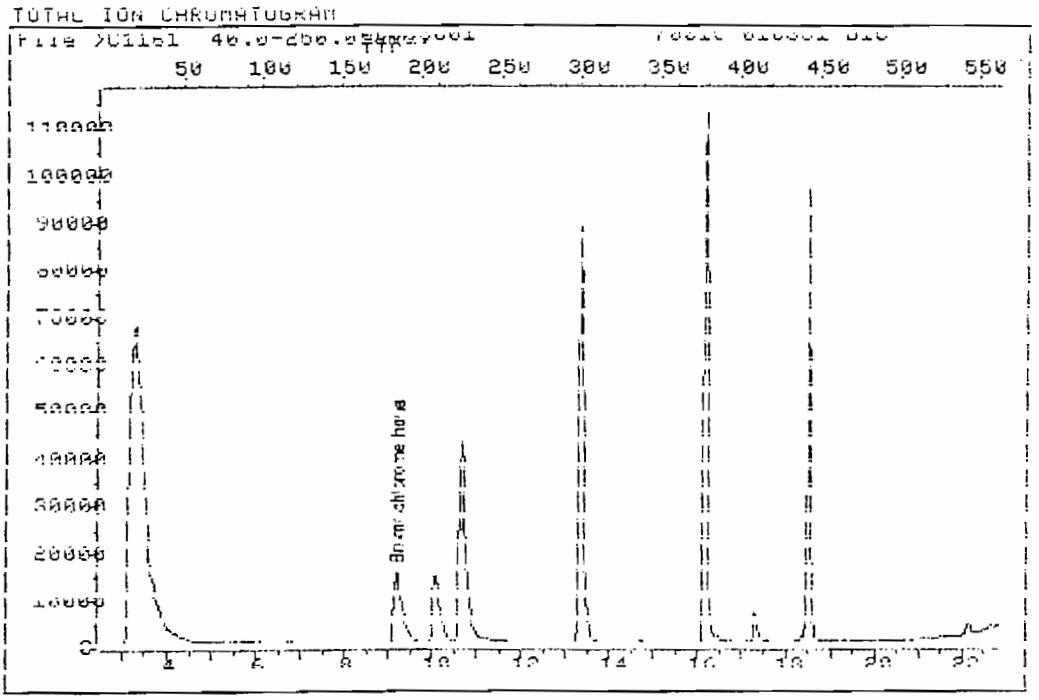
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					



Data File: >C:\ol::03 Quant Output File: ^C:\ol::QT
Name: eb033001 Instrument ID: >001 1.
Misc: 7001c 010331 b15

Id File: 10591U.::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Ncal Time: **:-406 07:5>

Operator ID: MANAGER
Quant Time : 010406 15:>>
Injected at: **0406 14:23



Data File: >C1161::D3
Name: eb033001
Misc: 700lc 010331 b15

Quant Output File: 'C1161::QT
Instrument ID: >H01 1.

Id File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: :

Last Qcal Time: **-H6 15:22

Operator ID: MANAGER
Quant Time : 010423 14:nn
Injected at: **0406 14:23

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 01-406 15:15
Output File: ^C1161::QT Injected at: **0406 14:23
Data File: >C1161::03 Dilution Factor: 1.0000
Name: eb033001 Instrument ID: 7001 C
Misc: 7001c 010331 bl5

ID File: ID591C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Qcal Time: **0406 09:53

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.18	128.0	17171	50.00	ug	87
19)	1,2-Dichloroethane-d4	10.04	65.0	88595	45.25	UG	72
22)	*1,4-Difluorobenzene	10.65	114.0	131180	50.00	ug	99
36)	*Chlorobenzene-d5	16.13	117.0	148642	50.00	UG	93
42)	Toluene d-8	13.32	98.0	191568	52.09	ug	99
48)	Bromofluorobenzene	18.51	95.0	84009	48.80	UG	7

* Compound is ISTD

QUANT REPORT Page 1

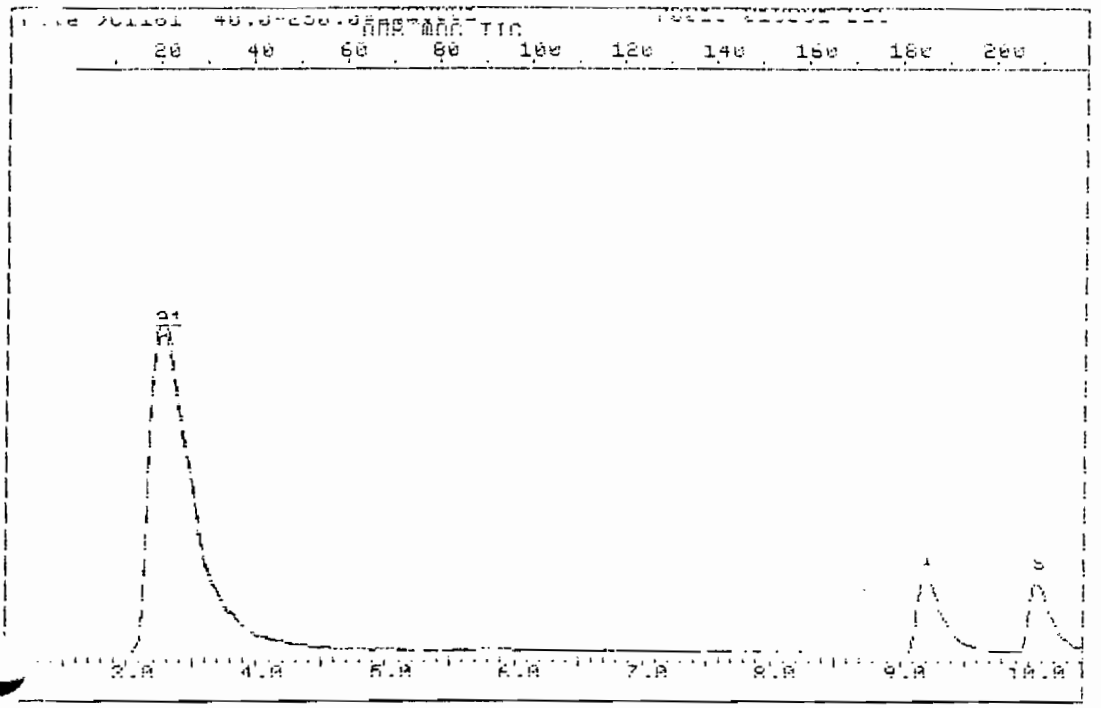
Operator ID: MANAGER Quant Rev: 7 Quant Time: 010423 14:00
Output File: C1161::QT Injected at: **0406 14:23
Data File: C1161::03 Dilution Factor: 1.000000
Name: eb033001 Instrument ID: 7001 C
Misc: 7001c 010331 b15

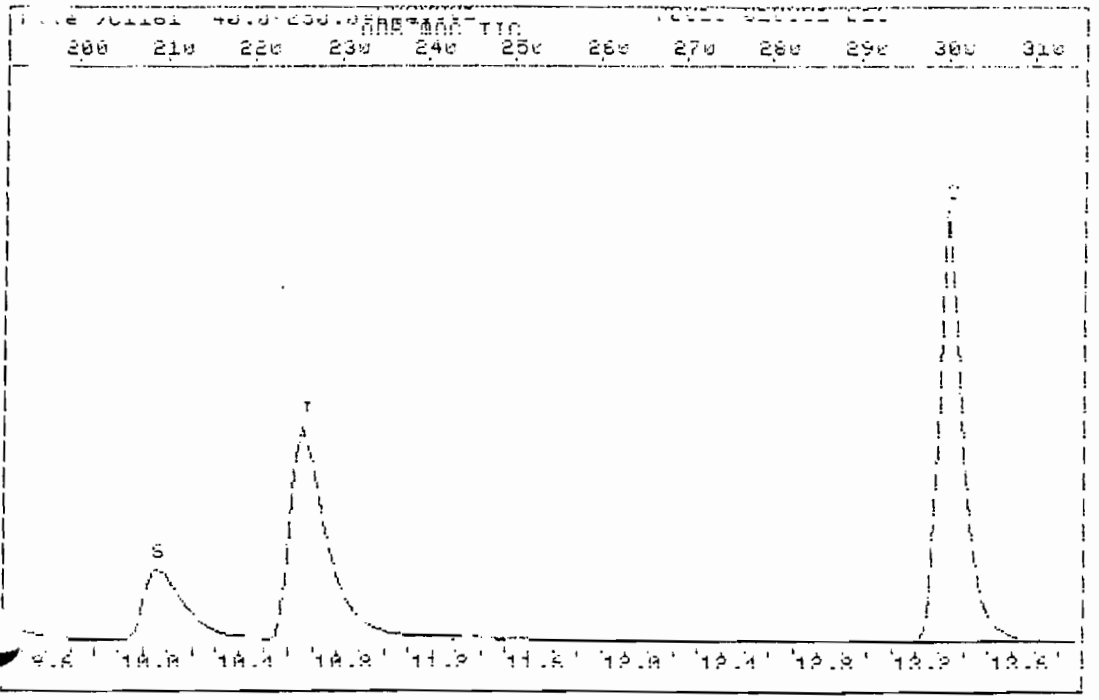
ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **0406 15:22

Compound	R.T.	Q ion	Area	Conc	Units	q
1) *Bromochloromethane	9.18	128.0	16928	50.000	ug	94

* Compound is ISTD

```
Rm data file header from : >C:161::0>

Sample: eb033001                Operator: MANAGER  SUPER GRP.   4/0x/91 14:1>
Misc  : 7001c 010331 b15
Sys. #:    1  MS model:  70  SW/HW rev.: LF  ALS # :  0     Equip ID: 7001  C
  Method file: METH03    Tuning file: MTY003   No. of extra records:  2
 Source temp.:   N/A  Analyzer temp.:  N/A     Transfer line temp. :   0

      Chromatographic temperatures :  45.   2>0.   2>0.     0.     0.
      Chromatographic times, min.  :  3.0   3>.0   3>.0    0.0    0.0
      Chromatographic rate, deg/min:  8.0     .1     0.0     .2     0.0


>t.i161        eb033001            7001c 010>51 b15
  40.01 250.0 i.P TIC
Unalope:  .2000 Area Reject:   21855. Max Peaks:  2  Bunch: -1 Valley >100 %
Unslope: 0.0000 Results File IC:i161   Sorted by Time/Area       INT

Peak    R.T.   first    max    last     peak      raw      corr.     corr.     % of
  #     min.   scan    scan   scan    height     area     area    % max.     total
---   ------  -----   -----  -----   ------  -------  -------  -------  -------
  1     3.26      14      21     62    67>52  171>>51   166/917   100.00    97.
  2    17.29     404     410    422     6467    84/70    4914l     2.95     2.

                          Sum of corrected areas:     171/>98.

      Summary of Unknowns PBM Library Search and Quantitation

                                          Retention       Unknown
      Standard   Concentration    Area       Time          Window
      --------   -------------  --------  ---------   ----------------
             1           50.0    218554.      9.18     2.54 -    9.7>
             2           50.0    446093.     10.69     9.91 -   15.39
             3           50.0    65>>66.     16.1>     1>.>9 -   2>.14

   Dilution Factor =     1.00          This sample was 1000.00  g or ml

 Correction Factor =     1.00

                          |Conc Int Std * Area Unknown|
Unknown Concentration = |--------------------------| * Correction Factor
                        |       Area Int Std        |

                                                5:09 PM  MON., 23  APR., 7001
```


TIC
20
40
60
80
100
120
140
160
180
200
A
S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200
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220
230
240
250
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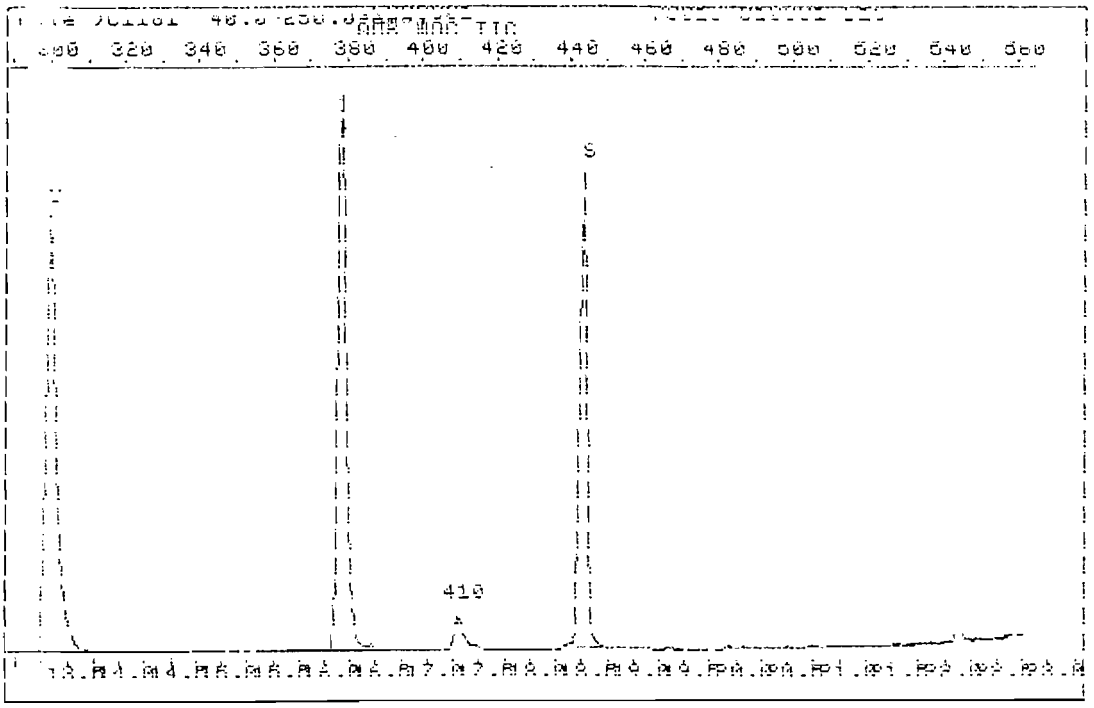
270
280
290
300
310
S
T
C



Instrument ID: Zinit Analyzed on: 4/11/01 14:17

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: TB033001
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1169
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	4.	J
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	2.	BJ
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	10.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: TB033001
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1169
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
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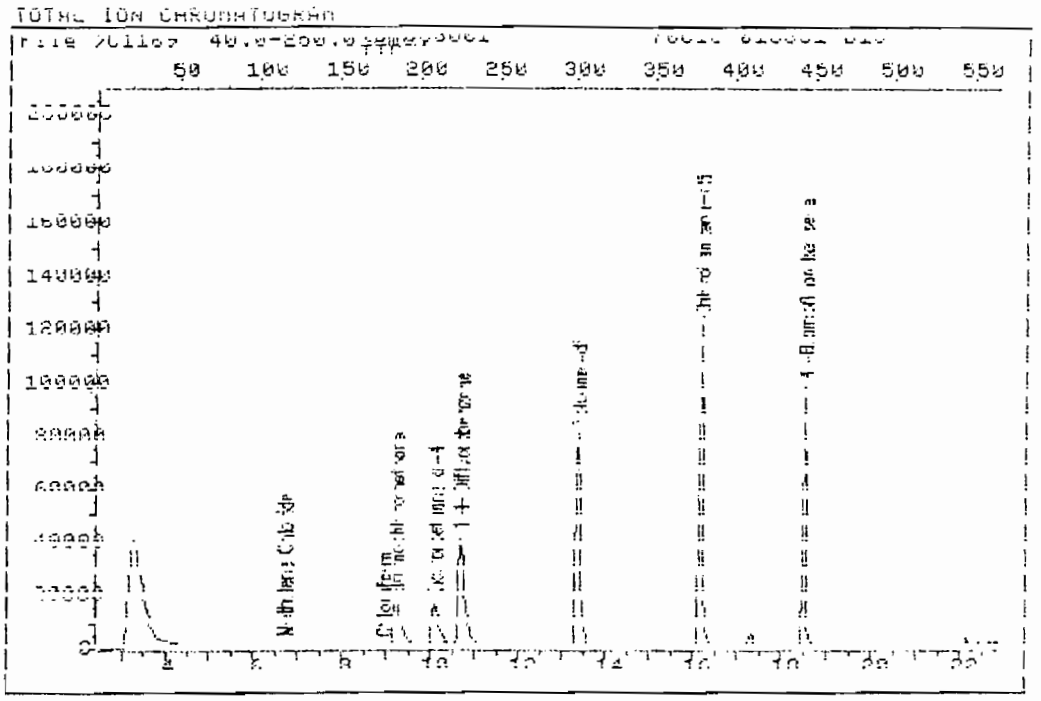
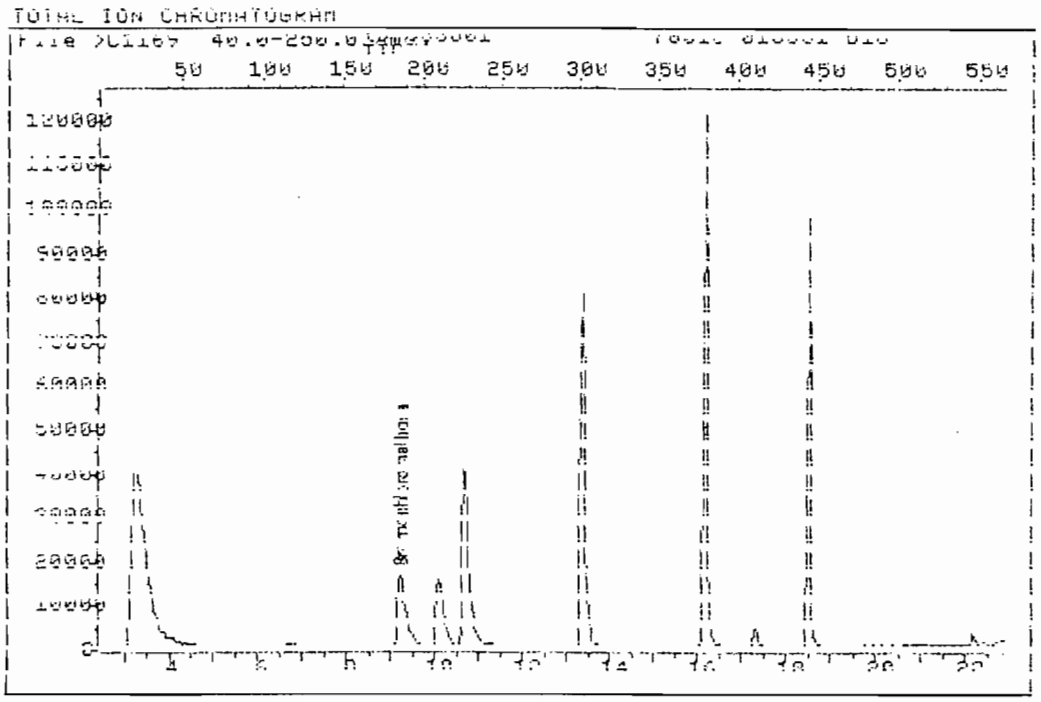
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					



Data File: >C:\169::03 Quant Output File: ^C:\169::Q1
Name: tb 033001 Instrument ID: >001
Misc: 7001c 010331 b1c

Id File: 10S91[illegible]::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:51 Last Qcal Time: **1-06 07:[illegible]

Operator ID: MANAGER
Quant Time : 010406 18:[illegible]
Injected at: **0406 18:18



Data File: >C1169::D9
Name: tb 033001
Misc: 7001c 010331 b16

Quant Output File: 'C1169::QT
Instrument ID: >001

Id File: !DF11?::MT
Title: Freon 113 ID File
Last Calibration: :

Last Qcal Time: **0406 1?:??

Operator ID: MANAGER
Quant Time : 010423 14:11
Injected at: **0406 18:18

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 011-06 18:42
Output File: ^C1169::QT Injected at: **04AR 18:18
Data File: >C1169::03 Dilution Factor: 1.0000
Name: tb 033001 Instrument ID: 7001 C
Misc: 7001c 010531 b16

ID File: ID591C::MT
Title: HP 591A Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Qcal Time: **14A6 09:53

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.21	128.0	17886	50.00	ng	
6)	Methylene Chloride	6.69	84.0	1518	4.19	UG	92
18)	Chloroform	8.92	83.0	2499	1.52	ng	
19)	1,2-Dichloroethane-d4	10.08	65.0	7154	49.18	UG	75
22)	*1,4-Difluorobenzene	10.65	114.0	129570	50.00	ng	
36)	*Chlorobenzene-d5	16.17	117.0	148065	50.00	UG	93
42)	Toluene d-8	13.56	98.0	189158	99.43	ng	
48)	Bromofluorobenzene	18.51	95.0	81536	50.14	UG	82

* Compound is ISTD

QUANT REPORT Page 1

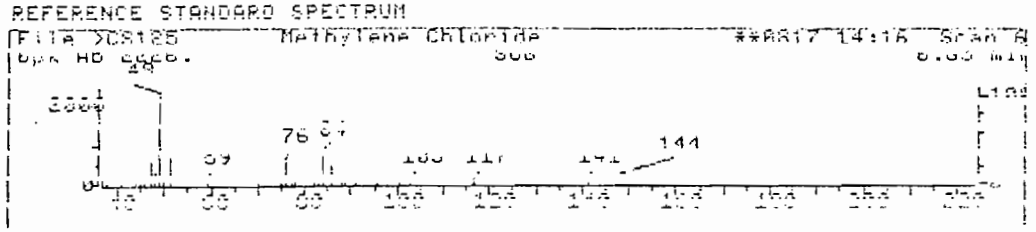
Operator ID: MANAGER Quant Rev: 7 Quant Time: 01/23/14:41
Output File: 'C1169::QT Injected at: **/04/06 18:18
Data File: >C1169::D3 Dilution Factor: 1.000000
Name: tb 033001 Instrument ID: 7001 C
Misc: 7001c 010331 b16

ID File: IDF:13::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **/04/06 15:22

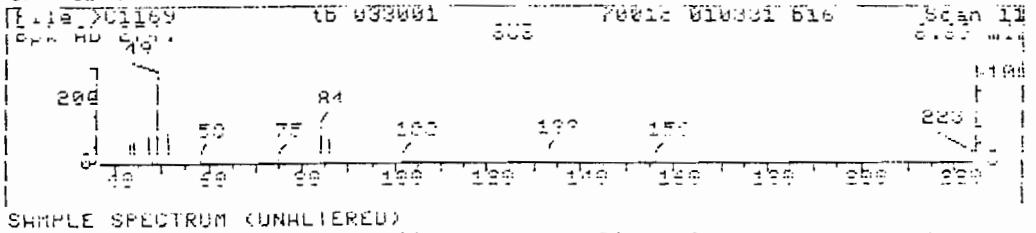
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.21	128.0	17038	50.00	ng	1.4

* Compound is ISTD

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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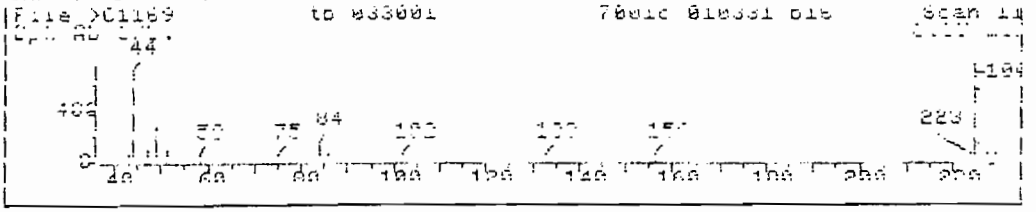
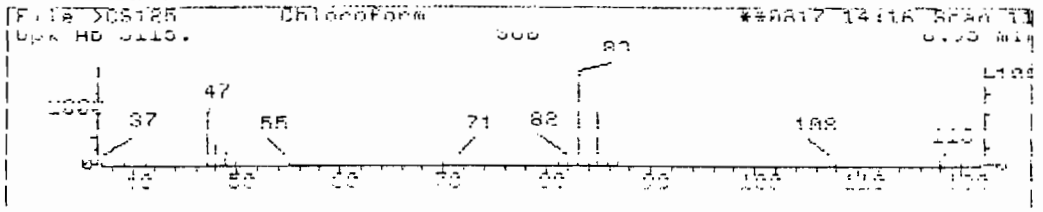


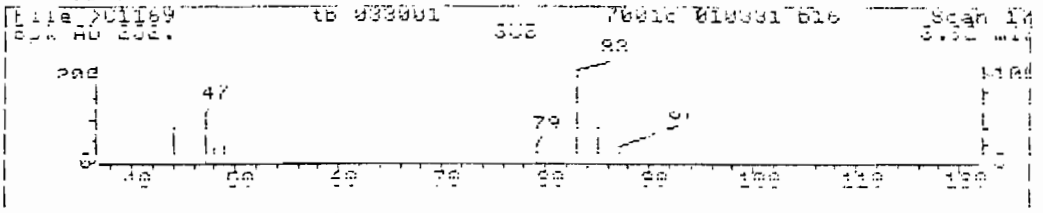
Data File: >C1169::03 Quant Output File: >C1169::QT
Name: tb 033001 Instrument ID: >001 C
Misc: 700ic 010331 b16
Quant Time: 010406 18:42 Quant ID File: [...]91C::QT
Injected at: **0406 18:18 Last Calibration: 000410 08:51
Last Qcal Time: **0406 09:53

Compound No : 6
Compound Name : Methylene Chloride
Scan Number : 117
Retention Time: 6.69 min
Quant Ion : 84.0
Area : 15[illegible]
Concentration : 4.19 UG
q-value : 92

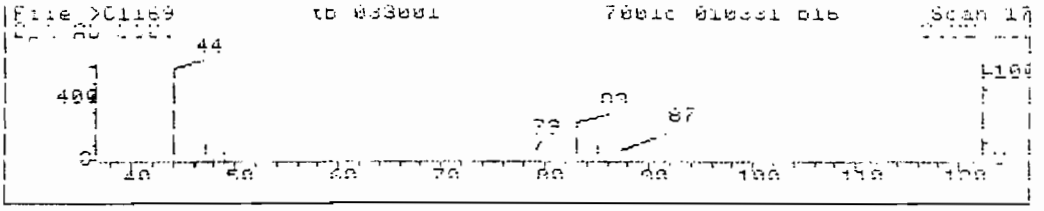
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >C1169::03
Name: tb 033001
Misc: 70ul6 010331 b16
Quant Time: 010406 18:42
Injected at: **0406 18:18
Last Qcal Time: **0406 09:53

Quant Output File: >C1169::Q1
Instrument ID: >301 1.

Quant ID File: [...]910::mT
Last Calibration: [illegible] 08:51

Compound No : 18
Compound Name : Chloroform
Scan Number : 179
Retention Time: 8.92 min.
Quant Ion : 83.0
Area : 2477
Concentration : 1.92 UG
q-value : 71

No data file header from : >C:1169::0>

Sample: tb 03>001 Operator: MANAGER SUPER VRP. 4/06/01 18:.8
Misc : 70011c 010331 b16
Sys. #: 1 MS model: 70 SW/HW rev.: 1.F ALS # : 0 Equip ID: 7001 C
Method file: METH03 Tuning file: MT9003 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures : 45. >11. >>0. 0. 0.
Chromatographic times, min. : 3.0 3>.0 3>.0 0.11 0.11
Chromatographic rate, deg/min: 8.0 .1 0.0 .> 1.0

>1.1169 tb 03>001 70011c 010>31 b16
40.01 >>0.0 1.LP 11C
Upslope: .2000 Area Reject: 21899. Max Peaks: 2 Bunch: -1 Valley >100 %
Unslope: 0.0000 Results File 1C.1169 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	3.27	14	22	67	41788	106761	1029611	100.00	96.4 4
2	17.32	405	412	424	4649	20302	39515	3.84	3.516

Sum of corrected areas: 106>125.

Summary of Unknowns PBM Library Search and Quantitation

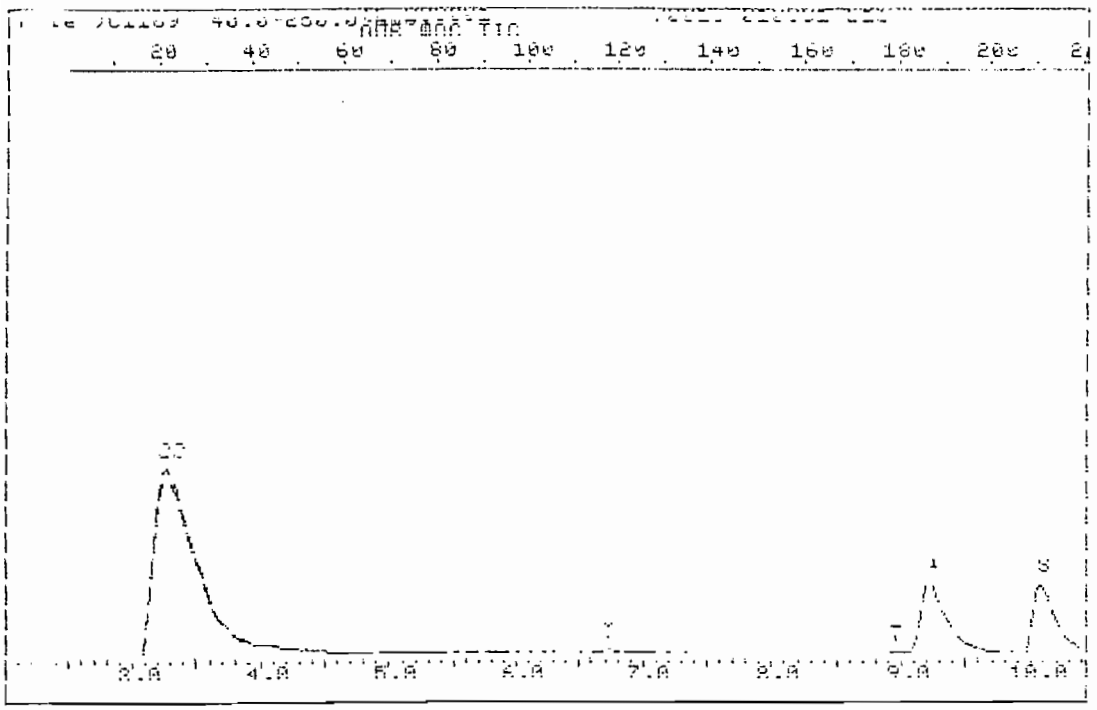
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	218947.	9.21	2.51 - 9.9>
2	50.0	4>4652.	11.65	9.9> - 1>.-1
3	50.0	613127.	16.17	1>.41 - 22.87

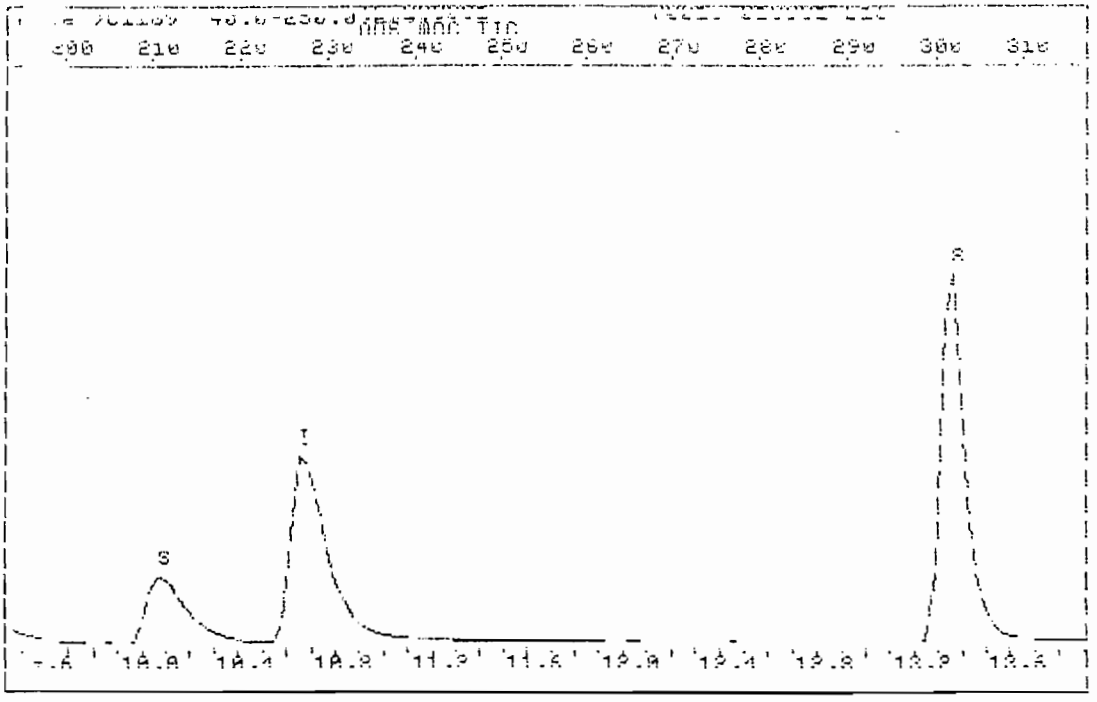
Dilution Factor = 1.00 This sample was 1000.00 g or m.

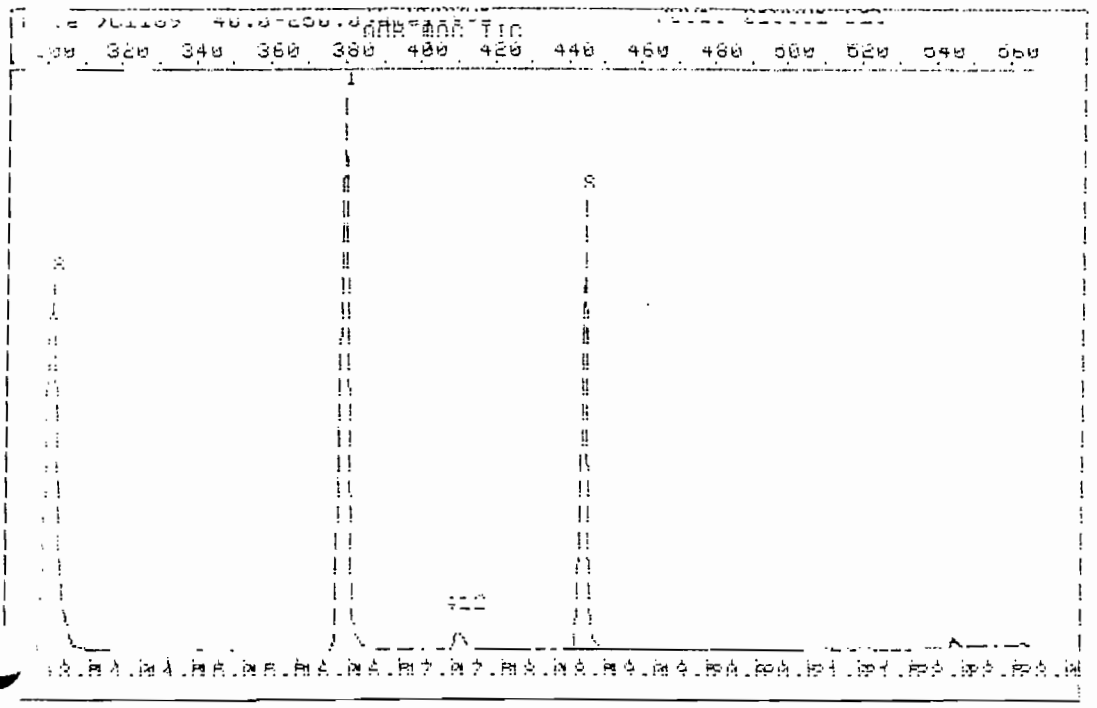
Correction Factor = 1.00

$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

6:57 PM MON., 2> APR., 2001


20
40
60
80
100
120
140
160
180
200
S
S


200
210
220
230
240
250
260
270
280
290
300
310
S
S



Instrument ID: 7000 Analyzed on: 4/16/00 18:18

STANDARDS

DATA

6A

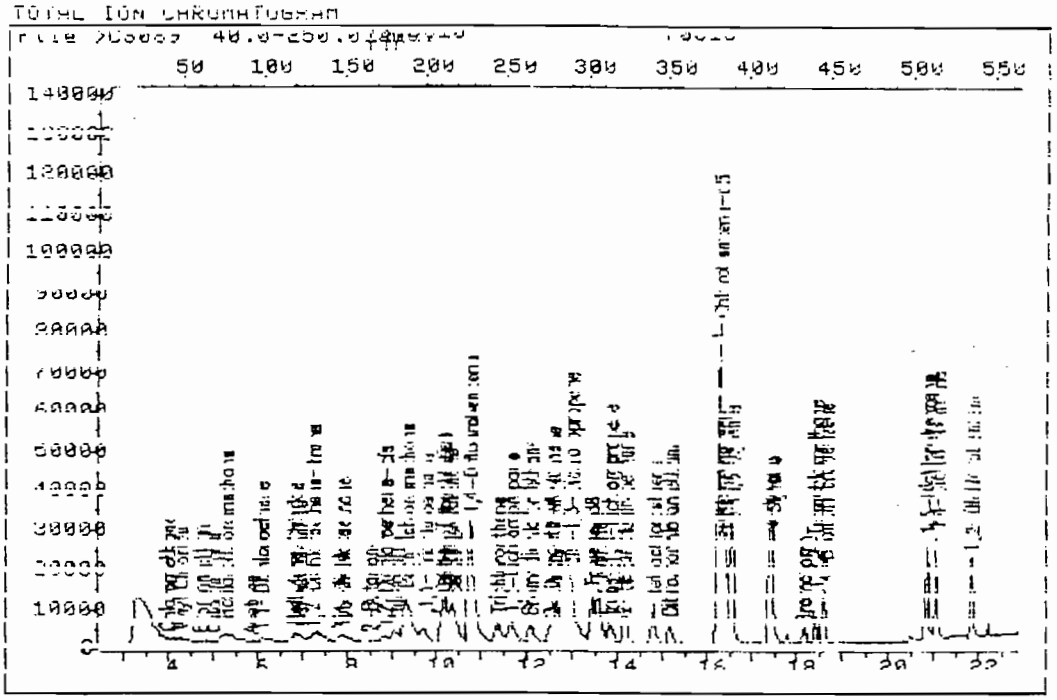
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Instrument ID: H5970 C Calibration Date(s): 03/30/01 03/30/01
Heated Purge: (Y/N) N Calibration Times: 11:52 13:50
GC Column: RTX502.2 ID: .32 (mm)

LAB FILE ID: RRF010= CS089 RRF020= CS090
RRF050= CS091 RRF100= CS092 RRF200= CS093

COMPOUND	RRF010	RRF020	RRF050	RRF100	RRF200	$\overline{RRF}$	% RSD
Chloromethane	.449	.546	.517	.242	.294	.410	33.0
Bromomethane *	.468	.552	.531	.365	.409	.465	17.0*
Vinyl Chloride *	.748	.803	.798	.600	.535	.697	17.5*
Chloroethane	.869	.685	.624	.496	.423	.619	28.0
Methylene Chloride	1.516	1.273	1.030	.986	.926	1.146	21.4
Acetone	1.265	1.166	1.229	.735	.756	1.030	25.5
Carbon Disulfide	5.920	5.073	4.661	4.269	4.249	4.834	14.4
1,1-Dichloroethene *	1.218	.943	.933	.837	.826	.951	16.7*
1,1-Dichloroethane *	3.467	3.331	3.064	2.684	2.686	3.046	11.8*
1,2-Dichloroethene-trans	1.198	1.102	1.049	.940	.933	1.044	10.7
Chloroform *	6.362	5.715	5.289	4.749	4.867	5.396	12.2*
1,2-Dichloroethane *	6.545	6.206	5.720	5.133	5.100	5.741	11.2*
2-Butanone	2.552	1.928	2.222	1.344	1.804	1.970	23.0
1,1,1-Trichloroethane *	.609	.554	.541	.519	.497	.544	7.8*
Carbon Tetrachloride *	.484	.395	.364	.345	.348	.387	14.9*
Bromodichloromethane *	.640	.572	.538	.530	.503	.556	9.5*
1,2-Dichloropropane	.556	.527	.471	.451	.418	.485	11.6
cis-1,3-Dichloropropene *	.904	.715	.659	.644	.604	.705	16.7*
Trichloroethene *	.309	.273	.272	.277	.264	.279	6.3*
Dibromochloromethane *	.341	.309	.272	.265	.244	.286	13.5*
1,1,2-Trichloroethane *	.339	.310	.287	.264	.250	.290	12.3*
Benzene *	1.531	1.504	1.402	1.401	1.341	1.436	5.5*
trans-1,3-Dichloropropene *	.685	.648	.615	.598	.568	.623	7.3*
Bromoform *	.180	.148	.141	.122	.116	.141	18.0*
4-Methyl-2-Pentanone	1.157	.959	.969	.972	.926	.997	9.2
2-Hexanone	.437	.396	.447	.407	.395	.416	5.8
Tetrachloroethene *	.244	.218	.216	.214	.224	.223	5.5*
1,1,2,2-Tetrachloroethane *	.520	.410	.422	.321	.342	.403	19.5*
Toluene *	1.639	1.514	1.532	1.569	1.592	1.569	3.2*
Chlorobenzene *	.992	.924	.893	.865	.851	.905	6.2*
Ethylbenzene *	.512	.510	.508	.472	.453	.491	5.5*
Styrene *	1.427	1.314	1.238	1.152	1.123	1.251	9.9*
Toluene d-8	1.368	1.357	1.370	1.414	1.428	1.387	2.3
Bromofluorobenzene *	.662	.616	.634	.554	.563	.606	7.7*
1,2-Dichloroethane-d4	5.307	4.946	4.680	4.216	4.139	4.658	10.6
1,2-Dichloroethene-cis	4.526	3.993	3.858	3.439	3.621	3.888	10.7
m,p-Xylenes	.669	.617	.573	.559	.513	.586	10.1
o-Xylene *	.810	.740	.724	.675	.656	.721	8.4*
Freon 113	1.425	1.415	1.689	1.367	1.414	1.462	8.8
	(10)	(20)	(50)	(100)	(500)		

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of .010.



Data File: >CS089::03 Quant Output File: ^CS089::SS
Name: VSTD010 Instrument ID: 7001 C
Misc: 7001C

Id File: IDC91C::M1
Title: HP VOA Continuing Calibration Standard
Last Calibration: 010228 14:50 Last Qcal Time: <none>

Operator ID: MANAGER
Quant Time : 010330 12:..
Injected at: **0330 11:52

Operator ID: MANAGER
Output File: ^CS089::SS
Data File: >CS089::03
Name: VSTD010
Misc: 7001C

Quant Rev: 7 Quant Time: 01-FEB-01 12:4
Injected at: **0330 11:52
Dilution Factor: 1.00
Instrument ID: 7001 C

ID File: IDC91C::MT
Title: HP VOA Continuing Calibration Standa
Last Calibration: 010228 14:50 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	*Bromochloromethane	9.30	128.0	11570	50.00	UG	97
2)	Chloromethane	3.96	50.0	1038	1.42	UG	68
3)	Bromomethane	4.72	94.0	108-M	2.36	UG	
4)	Vinyl Chloride	4.25	62.0	1731M	1.88	UG	92
5)	Chloroethane	4.97	64.0	20 M	.87	UG	
6)	Methylene Chloride	6.81	84.0	3509	4.90	UG	95
8)	Acetone	5.83	43.0	29 M	4.20	UG	
11)	Trichlorofluoromethane	5.26	101.0	12292	9.51	UG	98
12)	Carbon Disulfide	6.92	76.0	1378	.72	UG	
13)	1,1-Dichloroethene	6.05	96.0	2819M	5.23	UG	
14)	1,1-Dichloroethane	7.86	63.0	807	4.20	UG	
15)	1,2-Dichloroethene-trans	7.21	96.0	2773	4.62	UG	67
17)	1,2-Dichloroethene-cis	8.79	61.0	10479	11.56	UG	
18)	Chloroform	9.05	83.0	14721	10.95	UG	98
19)	1,2-Dichloroethane-d4	10.16	65.0	12281	12.32	UG	
20)	1,2-Dichloroethane	10.31	62.0	15146	11.14	UG	84
21)	2-Butanone	8.47	43.0	5906M	11.57	UG	100
22)	*1,4-Difluorobenzene	10.74	114.0	91464	50.00	UG	94
23)	1,1,1-Trichloroethane	9.23	97.0	11141	8.16	UG	86
24)	Carbon Tetrachloride	10.13	117.0	8854	7.14	UG	77
25)	Vinyl Acetate	7.82	43.0	12176M	4.01	UG	94
26)	Bromodichloromethane	12.04	83.0	11699	8.98	UG	74
27)	1,2-Dichloropropane	11.64	63.0	10166	9.41	UG	94
28)	cis-1,3-Dichloropropene	12.94	75.0	16531M	11.54	UG	81
29)	Trichloroethene	11.35	130.0	5653	8.98	UG	
30)	Dibromochloromethane	15.14	129.0	6237	7.89	UG	96
31)	1,1,2-Trichloroethane	14.13	97.0	6159	9.96	UG	
32)	Benzene	10.38	78.0	28004	9.38	UG	94
33)	trans-1,3-Dichloropropene	13.81	75.0	12529	10.14	UG	
34)	2-Chloroethylvinylether	12.51	63.0	5541	11.92	UG	92
35)	Bromoform	18.13	173.0	3294	7.93	UG	99
36)	*Chlorobenzene-d5	16.26	117.0	97298	50.00	UG	97
37)	2-Hexanone	14.09	43.0	8497M	10.87	UG	
38)	4-Methyl-2-Pentanone	12.54	43.0	22521	11.11	UG	74
39)	Tetrachloroethene	14.28	164.0	4757	10.08	UG	98
40)	1,1,2,2-Tetrachloroethane	18.39	83.0	10128	10.21	UG	98
41)	Toluene	13.55	91.0	31496	9.09	UG	95
42)	Toluene d-8	13.41	98.0	26621	9.68	UG	98
43)	Chlorobenzene	16.33	112.0	19311	9.45	UG	
44)	Ethylbenzene	16.40	106.0	9960	9.32	UG	90

Operator ID: MANAGER
Output File: ^CS089::SS
Data File: >CS089::03
Name: VSTD010
Misc: 200IC

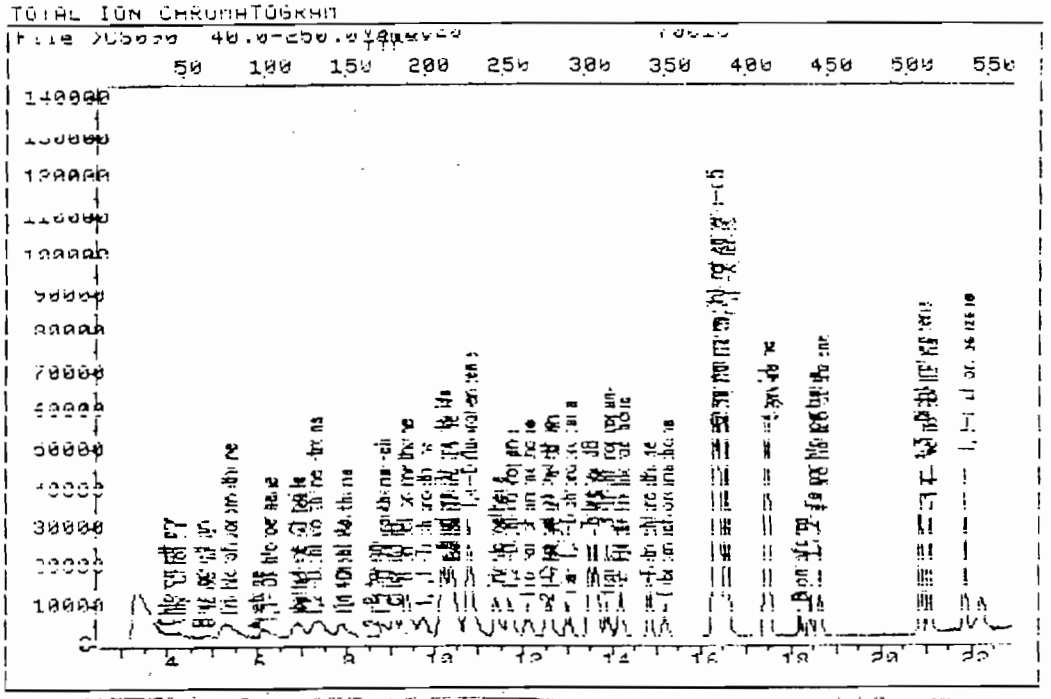
Quant Rev: 7 Quant Time: 010530 12:16
Injected at: ** :00 11:42
Dilution Factor: 1.000000
Instrument ID: 200 C

ID File: 1DC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 010228 14:50 Last Cal Title: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
45)	Styrene	17.45	104.0	27762	11.16	UG	99
46)	m,p-Xylenes	16.51	106.0	26[illegible]	[illegible].87	[illegible]	[illegible]
47)	o-Xylene	17.38	106.0	15763	11.40	UG	89
48)	Bromofluorobenzene	18.60	95.0	12[illegible]	1[illegible].94	[illegible]	[illegible]
49)	1,3-Dichlorobenzene	20.84	146.0	16140	10.73	UG	98
50)	1,4-Dichlorobenzene	21.05	146.0	16839	10.[illegible]2	[illegible]	[illegible]
51)	1,2-Dichlorobenzene	21.81	146.0	17588	11.22	UG	95

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >CS090::03 Quant Output File: ^CS090::SS
Name: VSTD020 Instrument ID: [illegible]
Misc: 7001C

Id File: IU.91C::[illegible]
Title: HP VOA Continuing Calibration Standard
Last Calibration: 010228 14:50 Last Qual Time: <nor>

Operator ID: MANAGER
Quant Time : 010330 12:46
Injected at: **0330 12:22

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 010[illegible]0 12:[illegible]
Output File: ^CS090::SS Injected at: **0330 12:22
Data File: >CS090::03 Dilution Factor: 1.000
Name: VSTD020 Instrument ID: 7001 C
Misc: 7001C

ID File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 010228 14:50 Last Qcal Time: <none>

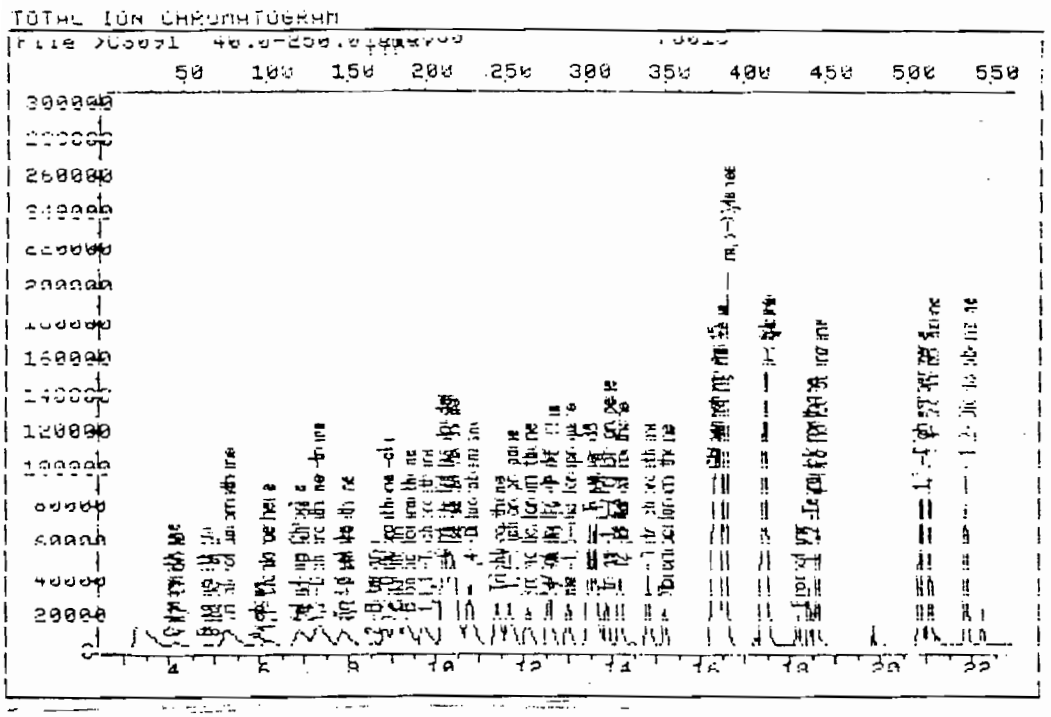
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.50	128.0	11760	50.00	UG	96
2)	Chloromethane	3.96	50.0	2569	3.45	UG	82
3)	Bromomethane	4.72	94.0	2598	5.57	UG	97
4)	Vinyl Chloride	4.21	62.0	3776	4.03	UG	88
5)	Chloroethane	4.86	64.0	3221M	6.09	UG	
6)	Methylene Chloride	6.84	84.0	5989	8.23	UG	96
8)	Acetone	5.94	43.0	5486	7125	[illegible]	[illegible]
11)	Trichlorofluoromethane	5.33	101.0	21624	16.46	UG	8
12)	Carbon Disulfide	6.92	76.0	23863	13.23	UG	1
13)	1,1-Dichloroethene	6.23	96.0	4438	8.10	UG	86
14)	1,1-Dichloroethane	7.93	63.0	15668	9.02	UG	86
15)	1,2-Dichloroethene-trans	7.24	96.0	5183	8.50	UG	84
17)	1,2-Dichloroethene-cis	8.79	61.0	18785	20.40	UG	94
18)	Chloroform	9.04	83.0	26885	19.67	UG	90
19)	1,2-Dichloroethane-d4	10.20	65.0	23765	22.97	UG	95
20)	1,2-Dichloroethane	10.34	62.0	29193	21.13	UG	92
21)	2-Butanone	8.54	43.0	9869M	17.48	UG	100
22)	*1,4-Difluorobenzene	10.78	114.0	90811	50.00	UG	94
23)	1,1,1-Trichloroethane	9.73	97.0	20119	14.85	UG	95
24)	Carbon Tetrachloride	10.16	117.0	14539	11.65	UG	98
25)	Vinyl Acetate	7.85	43.0	27540	9.10	UG	91
26)	Bromodichloromethane	12.07	83.0	20783	16.06	UG	86
27)	1,2-Dichloropropane	11.68	63.0	19119	17.84	UG	97
28)	cis-1,3-Dichloropropene	12.98	75.0	25990	18.27	UG	86
29)	Trichloroethene	11.39	130.0	9908	15.85	UG	94
30)	Dibromochloromethane	13.18	129.0	11227	14.31	UG	90
31)	1,1,2-Trichloroethane	14.17	97.0	11275	18.25	UG	97
32)	Benzene	10.42	78.0	54645	18.43	UG	97
33)	trans-1,3-Dichloropropene	13.84	75.0	23539	19.20	UG	94
34)	2-Chloroethylvinylether	12.51	63.0	10627	23.03	UG	91
35)	Bromoform	18.17	173.0	5590	13.07	UG	97
36)	*Chlorobenzene-d5	16.26	117.0	99733	50.00	UG	94
37)	2-Hexanone	14.13	43.0	15797	19.63	UG	94
38)	4-Methyl-2-Pentanone	12.58	43.0	38292	18.41	UG	96
39)	Tetrachloroethene	14.78	164.0	8713	18.01	UG	97
40)	1,1,2,2-Tetrachloroethane	18.42	83.0	-16370	16.10	UG	96
41)	Toluene	13.59	91.0	60353	18.79	UG	98
42)	Toluene d-8	13.44	98.0	54129	19.20	UG	92
43)	Chlorobenzene	16.33	112.0	36833	17.59	UG	97
44)	Ethylbenzene	16.40	106.0	20348	18.57	UG	92

Operator ID: MANAGER Quant Rev: 7 Quant Time: 010330 12:46
Output File: ^CS090::S5 Injected at: **:**:00 12:**
Data File: >CS090::03 Dilution Factor: 1.00000
Name: VSTD0020 Instrument ID: 7000 C
Misc: 7001C

ID File: 1081.91C::M1
Title: HP VOA Continuing Calibration Standard
Last Calibration: 010228 14:50 Last Cal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
45)	Styrene	17.48	104.0	52405	20.56	UG	97
46)	m,p-Xylenes	16.55	106.0	49244	39.66	UG	99
47)	o-Xylene	17.41	106.0	29525	20.83	UG	89
48)	Bromofluorobenzene	18.60	95.0	24592	21.98	UG	99
49)	1,3-Dichlorobenzene	20.87	146.0	28684	18.61	UG	99
50)	1,4-Dichlorobenzene	21.05	146.0	28576	17.25	UG	94
51)	1,2-Dichlorobenzene	21.85	146.0	31156	19.40	UG	89

* Compound is IS:D



Data File: >CS091::03 Quant Output File: ^CS091::SS
Name: VSTD050 Instrument ID: 7001 C
Misc: 7001C

Id File: IDC91C::M1
Title: HP VOA Continuing Calibration Standard
Last Calibration: 010228 14:50 Last Ncal Time: <nnna>

Operator ID: MANAGER
Quant Time : 010300 13:..
Injected at: **0330 12:51

Operator ID: MANAGER
Output File: ^CS091::SS
Data File: >CS091::03
Name: VSTD050
Misc: 7001C

Quant Rev: 7 Quant Time: 010330 15:
Injected at: **0330 12:51
Dilution Factor: 1.000
Instrument ID: 7001 C

ID File: ID091C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 010228 14:50 Last Qcal Time: <none>

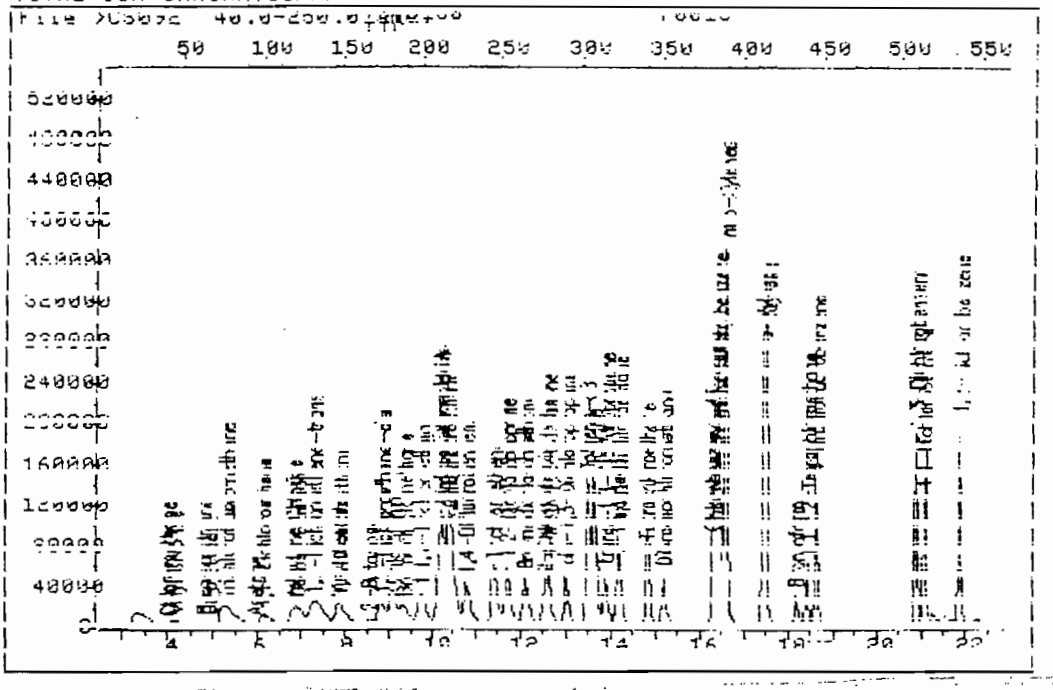
	Compound	R.T.	Q ion	Area	Conc	Units	%R
1)	*Bromochloromethane	9.54	128.0	1	50.00	UG	
2)	Chloromethane	4.04	50.0	6828	8.17	UG	77
3)	Bromomethane	4.26	94.0	7019M	13.40	UG	
4)	Vinyl Chloride	4.14	62.0	10541	10.02	UG	87
5)	Chloroethane	4.90	64.0	8249	13.89	UG	91
6)	Methylene Chloride	6.82	84.0	13609	16.64	UG	98
8)	Acetone	5.91	43.0	16241	20.42	UG	1
11)	Trichlorofluoromethane	5.26	101.0	55041	32.38	UG	94
12)	Carbon Disulfide	6.92	76.0	61577	30.59	UG	1
13)	1,1-Dichloroethene	6.13	96.0	12324	20.02	UG	81
14)	1,1-Dichloroethane	7.90	63.0	41483	20.75	UG	90
15)	1,2-Dichloroethene-trans	7.25	96.0	13858	21.22	UG	91
17)	1,2-Dichloroethene-cis	8.84	61.0	51976	49.28	UG	86
18)	Chloroform	9.05	83.0	69881	47.51	UG	94
19)	1,2-Dichloroethane-d4	10.21	65.0	61	54.33	%	
20)	1,2-Dichloroethane	10.35	62.0	75524	48.69	UG	89
21)	2-Butanone	8.51	43.0	29	50.36		
22)	*1,4-Difluorobenzene	10.78	114.0	102803	50.00	UG	93
23)	1,1,1-Trichloroethane	9.74	97.0	55	26.28		
24)	Carbon Tetrachloride	10.13	117.0	37155	26.87	UG	95
25)	Vinyl Acetate	7.83	43.0	7224	21.42		
26)	Bromodichloromethane	12.08	83.0	54880	37.75	UG	90
27)	1,2-Dichloropropane	11.69	63.0	48064	39.88	UG	
28)	cis-1,3-Dichloropropene	12.98	75.0	67186	42.05	UG	83
29)	Trichloroethene	11.40	130.0	27760	39.54	UG	
30)	Dibromochloromethane	15.18	129.0	27756	31.49	UG	95
31)	1,1,2-Trichloroethane	14.17	97.0	29227	42.1	UG	
32)	Benzene	10.39	78.0	143059	42.96	UG	98
33)	trans-1,3-Dichloropropene	13.85	75.0	62728	45.55	UG	91
34)	2-Chloroethylvinylether	12.52	63.0	29368	56.65	UG	92
35)	Bromoform	18.18	173.0	3401	51.08	UG	99
36)	*Chlorobenzene-d5	16.27	117.0	106927	50.00	UG	94
37)	2-Hexanone	14.14	43.0	47	55.44		
38)	4-Methyl-2-Pentanone	12.89	43.0	10	46.52	UG	73
39)	Tetrachloroethene	14.29	164.0	2	44.52		
40)	1,1,2,2-Tetrachloroethane	18.45	83.0	45	41.38	UG	99
41)	Toluene	13.80	91.0	163	41.47		
42)	Toluene d-8	13.46	98.0	146542	48.47	UG	90
43)	Chlorobenzene	16.54	112.0	95	47.90		
44)	Ethylbenzene	16.41	106.0	54334	46.25	UG	92

Operator ID: MANAGER Quant Rev: 7 Quant Time: 010330 13:15
Output File: ^CS091::SS Injected at: **:**:** 12:**:*
Data File: >CS091::03 Dilution Factor: 1.00000
Name: VSTD050 Instrument ID: 700 C
Misc: 7001C

ID File: IUF91C::"
Title: HP VOA Continuing Calibration Standard
Last Calibration: 010228 14:50 Last Qual Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
45)	Styrene	17.46	104.0	132393	48.44	UG	97
46)	m,p-xylenes	16.55	106.0	122531	89.08	UG	**
47)	o-xylene	17.42	106.0	77366	50.92	UG	88
48)	Bromofluorobenzene	13.61	95.0	67773	52.**	UG	**
49)	1,3-Dichlorobenzene	20.85	146.0	69911	42.51	UG	98
50)	1,4-Dichlorobenzene	21.06	146.0	74947	43.06	UG	92
51)	1,2-Dichlorobenzene	21.86	146.0	70667	41.03	UG	96

* Compound is ISTD



Data File: >CS092::03 Quant Output File: ^CS092::SS
Name: VSTD100 Instrument ID: 7001 C
Misc: 7001C

Id File: IDC91C::M1
Title: HP VOA Continuing Calibration Standard
Last Calibration: 010228 14:50 Last Qcal Time: <none>

Operator ID: MANAGER
Quant Time : 010330 13:--
Injected at: **0330 13:21

Operator ID: MANAGER Quant Rev: 7 Quant Time: 01 >0 1?:.4
Output File: ^CS092::S5 Injected at: **:>30 13:21
Data File: >CS092::03 Dilution Factor: 1.0
Name: VSTD100 Instrument ID: 7001 C
Misc: 7001C

ID File: IDC91C::MT
Title: HP VOA Continuing Calibration Standa n
Last Calibration: 010228 14:50 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.34	1?8.0	15227	50.00	UG	89
2)	Chloromethane	4.00	50.0	738tM	7.66	UG	79
3)	Bromomethane	4.79	94.0	11110	18.41	UG	
4)	Vinyl Chloride	4.14	62.0	18287M	15.08	UG	97
5)	Chloroethane	4.90	64.0	151 M	22.08		
6)	Methylene Chloride	6.81	84.0	30020	31.86	UG	96
8)	Acetone	5.94	43.0	22385	24.43		
11)	Trichlorofluoromethane	5.30	101.0	110031	64.69	UG	
12)	Carbon Disulfide	6.92	76.0	130819	55.66		
13)	1,1-Dichloroethene	6.13	96.0	25493	35.93	UG	85
14)	1,1-Dichloroethane	7.89	63.0	81741	36.35		
15)	1,2-Dichloroethene-trans	7.28	96.0	28624	36.24	UG	93
17)	1,2-Dichloroethene-cis	8.83	61.0	104741	87.86		
18)	Chloroform	9.08	83.0	144626	81.73	UG	97
19)	1,2-Dichloroethane-d4	10.20	65.0	128380	97.87	UG	
20)	1,2-Dichloroethane	10.35	62.0	156334	87.59	UG	92
21)	2-Butanone	8.54	43.0	40929	60.91	UG	100
22)	*1,4-Difluorobenzene	10.78	114.0	112709	50.00	UG	94
23)	1,1,1-Trichloroethane	9.23	97.0	116992	69.57	UG	89
24)	Carbon Tetrachloride	10.17	117.0	77826	50.93	UG	92
25)	Vinyl Acetate	7.86	43.0	142917	98.36	UG	98
26)	Bromodichloromethane	12.08	83.0	119395	74.33	UG	89
27)	1,2-Dichloropropane	11.68	63.0	101675	76.31	UG	93
28)	cis-1,3-Dichloropropene	12.98	75.0	145144	82.22	UG	85
29)	Trichloroethene	11.39	130.0	62349	88.38		
30)	Dibromochloromethane	15.18	129.0	59675	61.26	UG	94
31)	1,1,2-Trichloroethane	14.17	97.0	59467	71.57		
32)	Benzene	10.42	78.0	315856	85.85	UG	97
33)	trans-1,3-Dichloropropene	13.88	75.0	134821	88.60		
34)	2-Chloroethylvinylether	12.51	63.0	62449	109.02	UG	93
35)	Bromoform	18.18	173.0	27443	53.60	UG	
36)	*Chlorobenzene-d5	16.26	117.0	114448	50.00	UG	97
37)	2-Hexanone	14.14	43.0	93254	100.92	UG	
38)	4-Methyl-2-Pentanone	12.58	43.0	222568	99.53	UG	
39)	Tetrachloroethene	14.78	164.0	28982	88.24	UG	
40)	1,1,2,2-Tetrachloroethane	18.43	83.0	73467	62.95	UG	99
41)	Toluene	11.59	9 .0	359112	87.00	UG	
42)	Toluene d-8	13.45	98.0	325732	100.04	UG	98
43)	Chlorobenzene	16.34	112.0	197987	82.37	UG	99
44)	Ethylbenzene	16.41	106.0	108107	85.97	UG	94

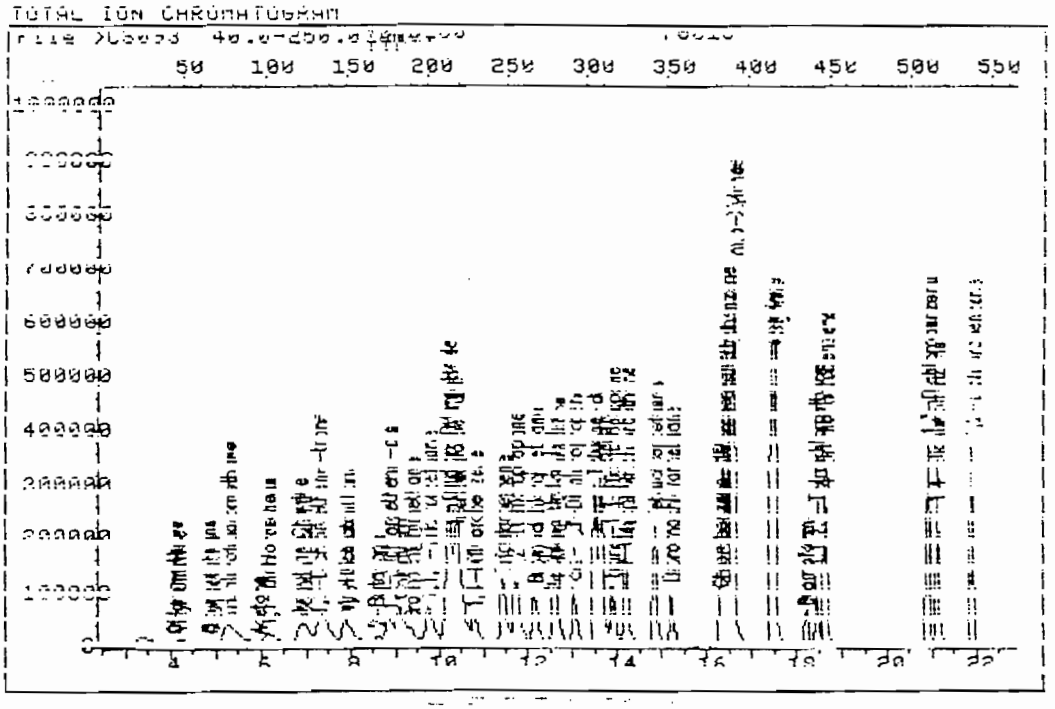
Operator ID: MANAGER
Output File: ^CS092::SS
Data File: >CS092::03
Name: VSTD100
Misc: 7001C

Quant Rev: 7 Quant Time: 010330 13:44
Injected at: **:**:50 1**:**:**
Dilution Factor: 1.000000
Instrument ID: 7001 C

ID File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 010228 14:50 Last Anal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
45)	Styrene	17.49	104.0	263981	98.10	UG	98
46)	m,p-Xylenes	16.55	106.0	256[illegible]	[illegible].09	[illegible]	[illegible]
47)	o-Xylene	17.42	106.0	154492	94.99	UG	91
48)	Bromofluorobenzene	18.61	95.0	126[illegible]	[illegible].53	[illegible]	[illegible]
49)	1,3-Dichlorobenzene	20.88	146.0	124851	78.59	UG	99
50)	1,4-Dichlorobenzene	21.06	146.0	129[illegible]	6[illegible].28	[illegible]	[illegible]
51)	1,2-Dichlorobenzene	21.86	146.0	156900	74.22	UG	96

* Compound is ISTD



Data File: >CS093::D3 Quant Output File: ^CS093::SS
Name: VSTD200 Instrument ID: 7001 C
Misc: 7001C

Id File: IDL91C::M1
Title: HP VOA Continuing Calibration Standard
Last Calibration: 010228 14:50 Last Qcal Time: <none>

Operator ID: MANAGER
Quant Time : 010330 14: 4
Injected at: **0330 13:50

QUANT REPORT Page 1

Operator ID: MANAGER
Output File: ^CS093::SS
Data File: >CS093::03
Name: VSTD200
Misc: 7001C

Quant Rev: / Quant Time: 01-FEB-01 14:4
Injected at: **-FEB-01 13:50
Dilution Factor: 1.0000
Instrument ID: 7000 C

ID File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 010228 14:50 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.35	128.0	15522	50.00	UG	
2)	Chloromethane	4.08	50.0	18267M	18.60	UG	89
3)	Bromomethane	4.80	94.0	254 M	41.91	UG	
4)	Vinyl Chloride	4.15	62.0	35235M	26.88	UG	99
5)	Chloroethane	4.82	64.0	267 M	7.64	UG	
6)	Methylene Chloride	6.82	84.0	57510	54.87	UG	96
8)	Acetone	5.92	43.0	4 5	58.27	UG	
11)	Trichlorofluoromethane	5.27	101.0	21521	192.97	UG	89
12)	Carbon Disulfide	6.93	76.0	263 0	111.82	UG	
13)	1,1-Dichloroethene	6.14	96.0	51275	70.89	UG	88
14)	1,1-Dichloroethane	7.91	63.0	1667 4	77.75	UG	
15)	1,2-Dichloroethene-trans	7.26	96.0	57956	71.98	UG	94
17)	1,2-Dichloroethene-cis	8.84	61.0	224859	185.01	UG	
18)	Chloroform	9.10	83.0	302159	167.50	UG	96
19)	1,2-Dichloroethane-d4	10.22	65.0	256973	192.18	UG	
20)	1,2-Dichloroethane	10.36	62.0	316640	173.63	UG	94
21)	2-Butanone	8.56	43.0	112004	163.52	UG	
22)	*1,4-Difluorobenzene	10.79	114.0	123933	50.00	UG	97
23)	1,1,1-Trichloroethane	9.75	97.0	24 538	133.33	UG	91
24)	Carbon Tetrachloride	10.18	117.0	172383	102.60	UG	93
25)	Vinyl Acetate	7.87	43.0	300484M	73.34	UG	99
26)	Bromodichloromethane	12.13	83.0	249200	141.10	UG	90
27)	1,2-Dichloropropane	11.69	63.0	204421	141.65	UG	92
28)	cis-1,3-Dichloropropene	12.99	75.0	299471	154.27	UG	86
29)	Trichloroethene	11.41	130.0	13 873	155.38	UG	
30)	Dibromochloromethane	15.20	129.0	121078	115.05	UG	96
31)	1,1,2-Trichloroethane	14.18	97.0	125 72	147.95	UG	
32)	Benzene	10.43	78.0	664862	164.34	UG	99
33)	trans-1,3-Dichloropropene	13.86	75.0	2813 6	168.16	UG	
34)	2-Chloroethylvinylether	12.52	63.0	124245	197.26	UG	92
35)	Bromoform	18.19	173.0	57338	101.84	UG	
36)	*Chlorobenzene-d5	16.28	117.0	116085	50.00	UG	96
37)	2-Hexanone	14.15	43.0	183202	195.52	UG	
38)	4-Methyl-2-Pentanone	12.63	43.0	429989	177.77	UG	72
39)	Tetrachloroethene	13.83	164.0	114084	184.85	UG	94
40)	1,1,2,2-Tetrachloroethane	18.44	83.0	158894	134.23	UG	92
41)	Toluene	17.61	91.0	7 9 57	176.59	UG	99
42)	Toluene d-8	13.46	98.0	662849	201.95	UG	91
43)	Chlorobenzene	16.25	112.0	397 06	162.06	UG	94
44)	Ethylbenzene	16.42	106.0	2104 0	164.96	UG	94

Operator ID: MANAGER Quant Rev: 7 Quant Time: 01/30/30 14:14
Output File: >CS093::SS Injected at: **/**/30 **:**:**
Data File: >CS093::05 Dilution Factor: 1.000000
Name: VSTD200 Instrument ID: >>>>1 C
Misc: 200UG

ID File: 10C91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 01/01/28 14:50 Last Cal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
45)	Styrene	17.50	104.0	521617	179.80	UG	98
46)	m,p-Xylenes	16.57	106.0	47[illegible]83	[illegible]84.86	[illegible]	[illegible]
47)	o-Xylene	17.43	106.0	304447	184.56	UG	90
48)	Bromofluorobenzene	18.62	95.0	26[illegible]55	[illegible]86.02	[illegible]	[illegible]
49)	1,3-Dichlorobenzene	20.90	146.0	25[illegible]704	141.42	UG	99
50)	1,4-Dichlorobenzene	21.08	146.0	264[illegible]1	141.97	[illegible]	[illegible]
51)	1,2-Dichlorobenzene	21.87	146.0	25[illegible]526	152.74	UG	91

* Compound is ISTD

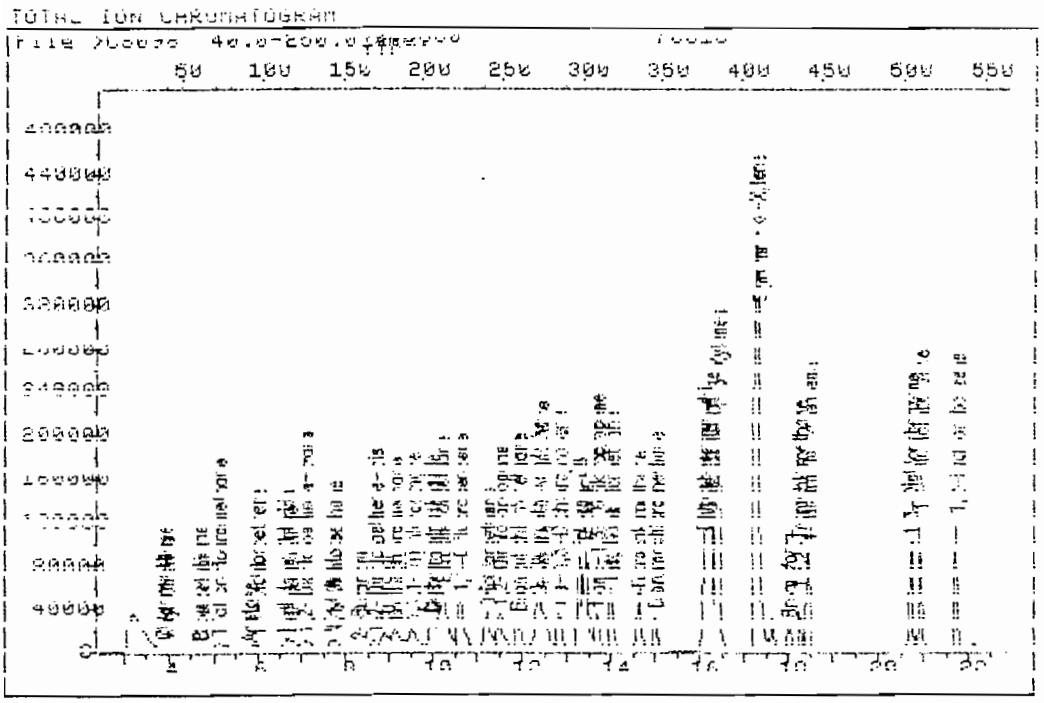
7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Instrument ID: H5970 C Calibration Date: 04/06/01 Time: 09:53
Lab File ID: CS098 Init. Calib. Date(s): 03/30/01 03/30/01
Heated Purge: (Y/N) N Init. Calib. Times: 11:52 13:50
GC Column: RTX502.2 ID: .32 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D	
Chloromethane	.410	.534		-30.2		
Bromomethane	.465	.452	.100	2.8	25.0	
Vinyl Chloride	.697	.761	.100	-9.2	25.0	
Chloroethane	.619	.538		13.1		
Methylene Chloride	1.146	1.013		11.6		
Acetone	1.030	.489		52.5		
Carbon Disulfide	4.834	4.224		12.6		
1,1-Dichloroethene	.951	.794	.100	16.5	25.0	
1,1-Dichloroethane	3.046	2.683	.200	11.9	25.0	
1,2-Dichloroethene-trans	1.044	.933		10.6		
Chloroform	5.396	4.597	.200	14.8	25.0	
1,2-Dichloroethane	5.741	5.451	.100	5.1	25.0	
2-Butanone	1.970	.788		60.0		
1,1,1-Trichloroethane	.544	.482	.100	11.4	25.0	
Carbon Tetrachloride	.387	.345	.100	10.9	25.0	
Bromodichloromethane	.556	.504	.200	9.4	25.0	
1,2-Dichloropropane	.485	.410		15.5		
cis-1,3-Dichloropropene	.705	.650	.200	7.8	25.0	
Trichloroethene	.279	.274	.300	1.8	25.0	
Dibromochloromethane	.286	.290	.100	-1.4	25.0	
1,1,2-Trichloroethane	.290	.295	.100	-1.7	25.0	
Benzene	1.436	1.309	.500	8.8	25.0	
trans-1,3-Dichloropropene	.623	.612	.100	1.8	25.0	
Bromoform	.141	.154	.100	-9.2	25.0	
4-Methyl-2-Pentanone	.997	.876		12.1		
2-Hexanone	.416	.247		40.6		
Tetrachloroethene	.223	.213	.200	4.5	25.0	
1,1,2,2-Tetrachloroethane	.403	.291	.500	27.8	25.0	
Toluene	1.569	1.431	.400	8.8	25.0	
Chlorobenzene	.905	.860	.500	5.0	25.0	
Ethylbenzene	.491	.460	.100	6.3	25.0	
Styrene	1.251	1.200	.300	4.1	25.0	
Toluene d-8	1.387	1.237		10.8		
Bromofluorobenzene	.606	.579	.200	4.5	25.0	
1,2-Dichloroethane-d4	4.658	4.427		5.0		
1,2-Dichloroethene-cis	3.888	2.797		28.1		
m,p-Xylenes	.586	.552		5.8		
o-Xylene	.721	.661	.010	8.3	25.0	
Freon 113	1.462	1.447		1.0		c1163

All other compounds must meet a minimum RRF of .010.



Data File: >CS0198::03 Quant Output File: ^CS0198::Q1
Name: VST0050 Instrument ID: >001
Misc: 7001C

Id File: ID0191C::M1
Title: HP VOA Continuing Calibration Standard
Last Calibration: 010402 07:19 Last Ucal Time: <none>

Operator ID: MANAGER
Quant Time : 010406 10:
Injected at: **0406 09:53

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 010402 10:12
Output File: ^CS098::QT Injected at: **0406 09:53
Data File: >CS098::D3 Dilution Factor: 1.000000
Name: VSTD050 Instrument ID: 7001 C
Misc: 7001C

ID File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 010402 07:19 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	*Bromochloromethane	9.11	128.0	15689	50.00	ug	97
2)	Chloromethane	3.88	50.0	8383	69.22	UG	82
3)	Bromomethane	4.68	94.0	7886	48.54	ug	97
4)	Vinyl Chloride	3.96	62.0	11934	54.58	UG	82
5)	Chloroethane	4.71	64.0	8458	49.41	ug	94
6)	Methylene Chloride	6.62	84.0	15882	44.17	UG	92
8)	Acetone	5.80	43.0	2671	29.73	ug	100
11)	Trichlorofluoromethane	5.11	101.0	58384	88.09	UG	86
12)	Carbon Disulfide	6.23	76.0	66274	49.69	ug	100
13)	1,1-Dichloroethene	5.98	96.0	12464	41.75	UG	89
14)	1,1-Dichloroethane	7.71	63.0	42194	44.14	ug	99
15)	1,2-Dichloroethene-trans	7.16	96.0	14638	44.66	UG	84
17)	1,2-Dichloroethene-cis	8.64	61.0	43882	39.98	ug	97
18)	Chloroform	8.86	83.0	72127	42.61	UG	99
19)	1,2-Dichloroethane-d4	9.98	65.0	69456	47.53	ug	94
20)	1,2-Dichloroethane	10.16	62.0	85528	42.48	UG	93
21)	2-Butanone	8.28	43.0	12366	200.00	ug	100
22)	*1,4-Difluorobenzene	10.59	114.0	159241	50.00	UG	94
23)	1,1,1-Trichloroethane	9.51	97.0	65219	44.32	ug	94
24)	Carbon Tetrachloride	9.94	117.0	46645	44.54	UG	99
25)	Vinyl Acetate	7.67	43.0	64311	39.58	ug	100
26)	Bromodichloromethane	11.89	83.0	68160	49.29	UG	93
27)	1,2-Dichloropropane	11.49	63.0	55431	42.29	ug	99
28)	cis-1,3-Dichloropropene	12.79	75.0	82873	46.07	UG	84
29)	Trichloroethene	11.20	130.0	32012	49.07	ug	99
30)	Dibromochloromethane	14.99	129.0	39776	50.73	UG	99
31)	1,1,2-Trichloroethane	13.98	97.0	39845	50.82	ug	99
32)	Benzene	10.19	78.0	176965	49.56	UG	96
33)	trans-1,3-Dichloropropene	13.66	75.0	82714	49.11	ug	99
34)	2-Chloroethylvinylether	12.32	63.0	32757	49.46	UG	96
35)	Bromoform	17.99	173.0	21764	54.29	ug	94
36)	*Chlorobenzene-d5	16.07	117.0	150387	50.00	UG	93
37)	2-Hexanone	13.95	43.0	37212	99.71	ug	91
38)	4-Methyl-2-Pentanone	12.40	43.0	151706	49.93	UG	72
39)	Tetrachloroethene	14.60	164.0	32025	47.66	ug	94
40)	1,1,2,2-Tetrachloroethane	18.24	83.0	49240	36.07	UG	98
41)	Toluene	13.41	91.0	215195	49.59	ug	98
42)	Toluene d-8	13.26	98.0	186142	44.58	UG	92
43)	Chlorobenzene	16.15	112.0	129391	47.54	ug	94

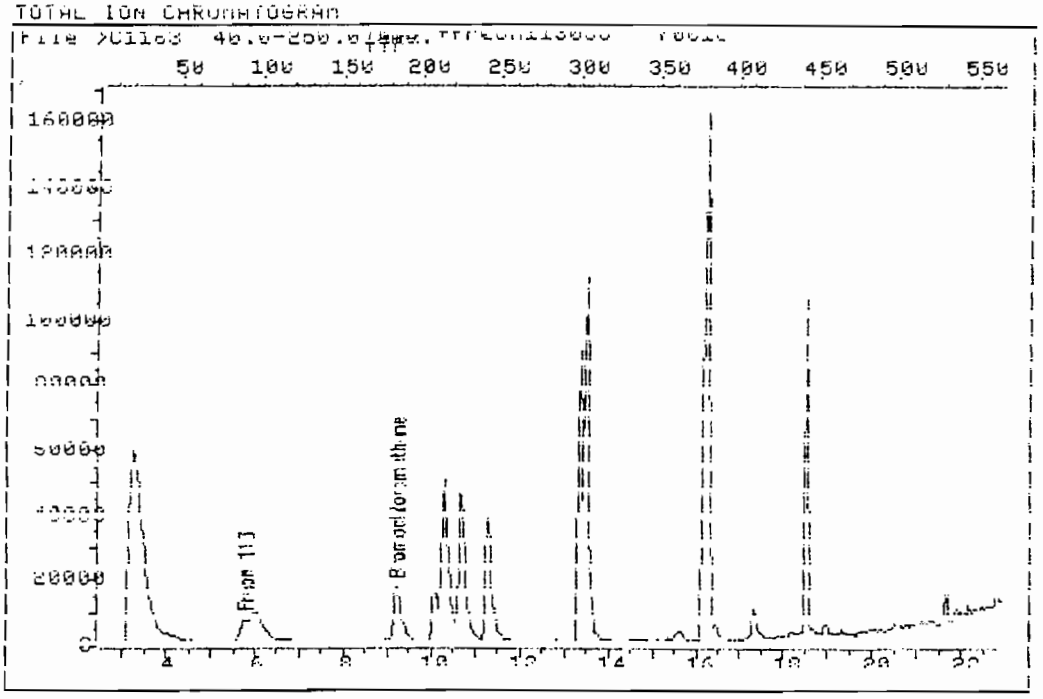
Operator ID: MANAGER Quant Rev: 7 Quant Time: 010402 10:17
Output File: ^CS098::QT Injected at: **-**6 09:53
Data File: >CS098::D5 Dilution Factor: 1.000000
Name: VSTD050 Instrument ID: 2000 C
Misc: 2000C

ID File: ID.91C::M1
Title: HP VOA Continuing Calibration Standard
Last Calibration: 010402 07:19 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
45)	Styrene	17.30	104.0	181482	47.98	UG	95
46)	m,p-Xylenes	16.56	106.0	166155	94.20	UG	97
47)	o-Xylene	17.23	106.0	99359	49.83	UG	99
48)	Bromofluorobenzene	18.46	95.0	87885	47.79	UG	99
49)	1,3-Dichlorobenzene	20.69	146.0	89441	45.12	UG	98
50)	1,4-Dichlorobenzene	20.91	146.0	86305	47.07	UG	1
51)	1,2-Dichlorobenzene	21.70	146.0	81417	39.64	UG	

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >C1163::03
Name: vmsb +freon113050
Misc: 7001c

Quant Output File: 'C1163::QT
Instrument ID: 7001

Id File: IDF113::M1
Title: Freon 113 ID File
Last Calibration: :

Last Ncal Time: **-09 11:49

Operator ID: MANAGER
Quant Time : 010423 11:49
Injected at: **0406 15:22

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 0104-23 1:45
Output File: 'C1163::QT Injected at: **0406 15:22
Data File: >C1163::03 Dilution Factor: 1.000000
Name: vmsb +freon113050 Instrument ID: 7001 C
Misc: 7001c

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **0409 10:45

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.20	128.0	18202	50.00	UG	97
2)	Freon 113	5.27	101.0	27059	42.84	UG	90

* Compound is ISTD

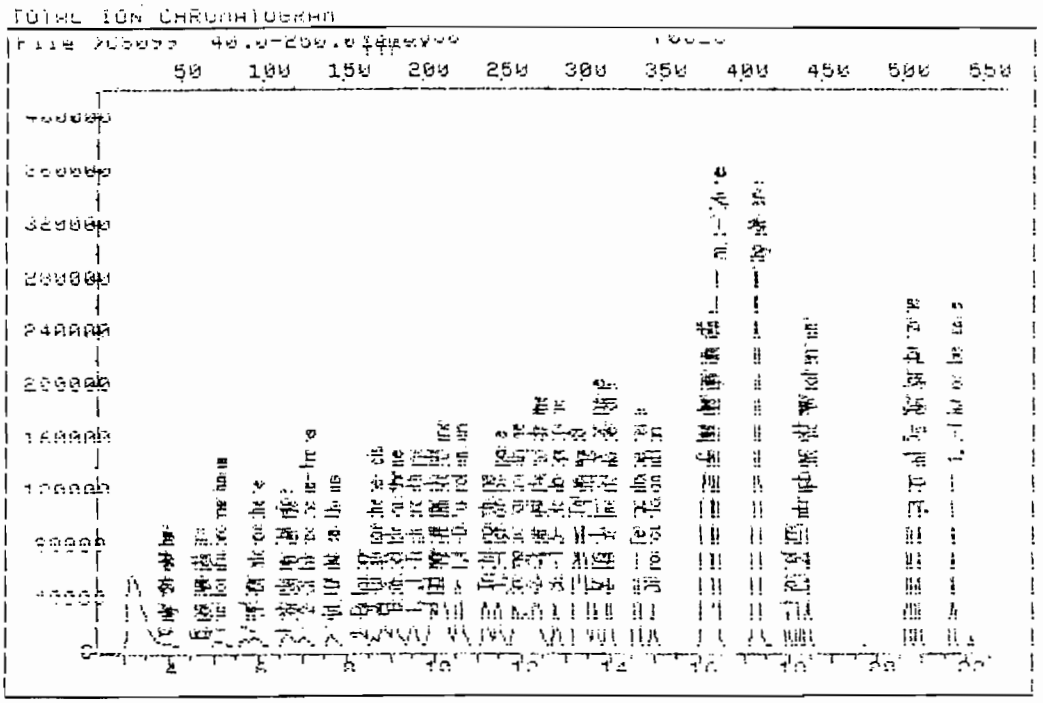
7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Instrument ID: H5970 C Calibration Date: 04/07/01 Time: 11:44
Lab File ID: CS099 Init. Calib. Date(s): 03/30/01 03/30/01
Heated Purge: (Y/N) N Init. Calib. Times: 11:52 13:50
GC Column: RTX502.2 ID: .32 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Chloromethane	.410	.493		-20.2	
Bromomethane	.465	.412	.100	11.4	25.0
Vinyl Chloride	.697	.810	.100	-16.2	25.0
Chloroethane	.619	.642		-3.7	
Methylene Chloride	1.146	1.026		10.5	
Acetone	1.030	.851		17.4	
Carbon Disulfide	4.834	4.587		5.1	
1,1-Dichloroethene	.951	.801	.100	15.8	25.0
1,1-Dichloroethane	3.046	2.800	.200	8.1	25.0
1,2-Dichloroethene-trans	1.044	.902		13.6	
Chloroform	5.396	4.493	.200	16.7	25.0
1,2-Dichloroethane	5.741	5.492	.100	4.3	25.0
2-Butanone	1.970	1.443		26.8	
1,1,1-Trichloroethane	.544	.482	.100	11.4	25.0
Carbon Tetrachloride	.387	.382	.100	1.3	25.0
Bromodichloromethane	.556	.541	.200	2.7	25.0
1,2-Dichloropropane	.485	.427		12.0	
cis-1,3-Dichloropropene	.705	.654	.200	7.2	25.0
Trichloroethene	.279	.280	.300	-.4	25.0
Dibromochloromethane	.286	.298	.100	-4.2	25.0
1,1,2-Trichloroethane	.290	.299	.100	-3.1	25.0
Benzene	1.436	1.333	.500	7.2	25.0
trans-1,3-Dichloropropene	.623	.599	.100	3.9	25.0
Bromoform	.141	.146	.100	-3.5	25.0
4-Methyl-2-Pentanone	.997	.818		18.0	
2-Hexanone	.416	.368		11.5	
Tetrachloroethene	.223	.211	.200	5.4	25.0
1,1,2,2-Tetrachloroethane	.403	.287	.500	28.8	25.0
Toluene	1.569	1.496	.400	4.7	25.0
Chlorobenzene	.905	.871	.500	3.8	25.0
Ethylbenzene	.491	.498	.100	-1.4	25.0
Styrene	1.251	1.223	.300	2.2	25.0
Toluene d-8	1.387	1.281		7.6	
Bromofluorobenzene	.606	.566	.200	6.6	25.0
1,2-Dichloroethane-d4	4.658	4.536		2.6	
1,2-Dichloroethene-cis	3.888	2.767		28.8	
m,p-Xylenes	.586	.548		6.5	
o-Xylene	.721	.712	.010	1.2	25.0
Freon 113	1.462	1.611		10.2	

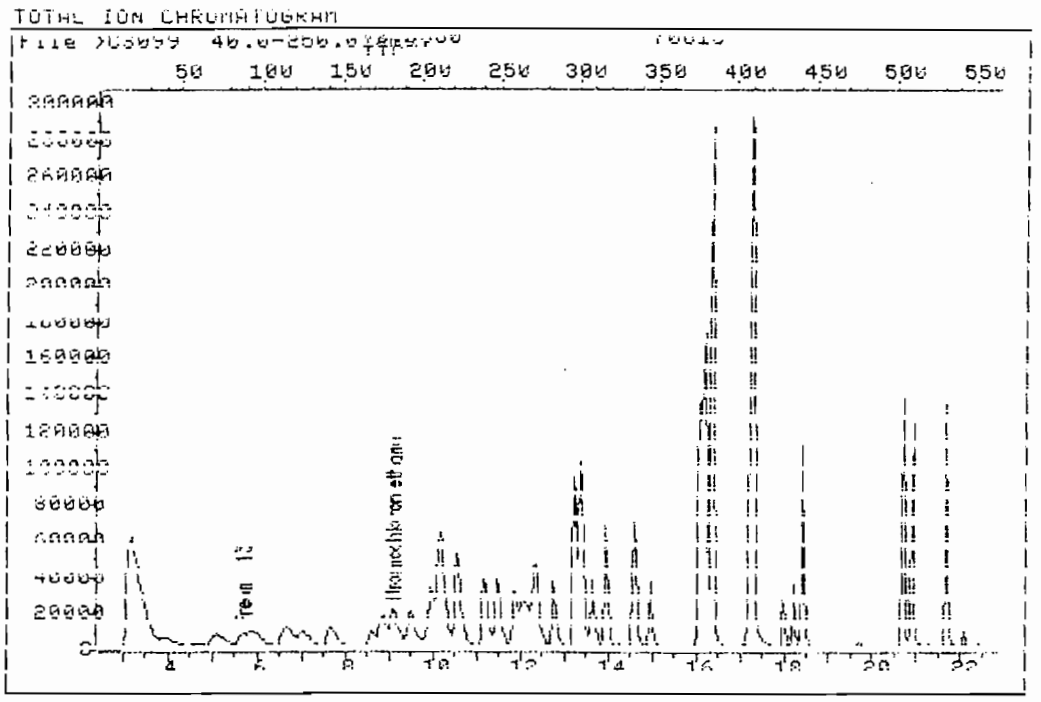
All other compounds must meet a minimum RRF of .010.



Data File: >CS099::03 Quant Output File: ^CS099::QT
Name: VSTD050 Instrument ID: 7001 L
Misc: 7001C

Id File: ID091C::
Title: HP 90A Continuing Calibration Standard
Last Calibration: 010402 07:19 Last Cal Time: <none>

Operator ID: MANAGER
Quant Time : 010407 12:
Injected at: **0407 11:44



Data File: >CSH99::03
Name: USTD050
Misc: 7001C

Quant Output File: 'CSH99::QT
Instrument ID: 7001

Id File: IDF113::D1
Title: Freon 113 ID File
Last Calibration: :

Last Qcal Time: **0409 10:45

Operator ID: MANAGER
Quant Time : 010423 11:44
Injected at: **0407 11:44

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 010402 12:17
Output File: >CSU99::QT Injected at: **0402 11:44
Data File: >CSU99::03 Dilution factor: 1.0000
Name: VSTD050 Instrument ID: 7001 C
Misc: 7001C

In File: IDC91C::MT
Title: HP VOA Continuing Calibration standard
Last Calibration: 010402 07:19 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	*Bromochloromethane	9.08	128.0	17879	50.00	ug/L	91
2)	Chloromethane	3.92	50.0	8888	60.13	UG/L	81
3)	Bromomethane	4.64	94.0	7999	44.25	ug/L	97
4)	Vinyl Chloride	3.95	62.0	14488	58.12	UG/L	95
5)	Chloroethane	4.25	64.0	11469	51.29	ug/L	94
6)	Methylene Chloride	6.55	84.0	18542	44.26	UG/L	99
8)	Acetone	5.26	43.0	15289	41.29	ug/L	
11)	Trichlorofluoromethane	5.11	101.0	56616	74.98	UG/L	
12)	Carbon Disulfide	6.20	76.0	81992	47.44	ug/L	100
13)	1,1-Dichloroethene	5.94	96.0	14515	47.08	UG/L	86
14)	1,1-Dichloroethane	7.67	63.0	31057	49.96	ug/L	0
15)	1,2-Dichloroethene-trans	7.09	96.0	16121	49.17	UG/L	88
17)	1,2-Dichloroethene-cis	8.61	61.0	49464	99.59	ug/L	0
18)	Chloroform	8.82	83.0	81312	41.63	UG/L	97
19)	1,2-Dichloroethane-d4	9.98	65.0	81089	48.20	ug/L	0
20)	1,2-Dichloroethane	10.12	62.0	98128	47.84	UG/L	89
21)	2-Butanone	8.28	43.0	25297	98.63	ug/L	100
22)	*1,4-Difluorobenzene	10.55	114.0	191194	50.00	UG/L	94
23)	1,1,1-Trichloroethane	9.51	97.0	22434	44.32	ug/L	97
24)	Carbon Tetrachloride	9.90	117.0	57326	49.33	UG/L	95
25)	Vinyl Acetate	7.63	43.0	21782	99.49	ug/L	98
26)	Bromodichloromethane	11.85	83.0	81234	48.60	UG/L	89
27)	1,2-Dichloropropane	11.46	63.0	64130	44.05	ug/L	97
28)	cis-1,3-Dichloropropene	12.75	75.0	98285	46.41	UG/L	84
29)	Trichloroethene	11.17	130.0	42140	50.18	ug/L	91
30)	Dibromochloromethane	14.96	129.0	44792	52.10	UG/L	96
31)	1,1,2-Trichloroethane	13.95	97.0	44891	51.56	ug/L	97
32)	Benzene	10.16	78.0	211275	46.43	UG/L	98
33)	trans-1,3-Dichloropropene	13.66	75.0	89914	48.07	ug/L	91
34)	2-Chloroethylvinylether	12.29	63.0	44161	52.09	UG/L	92
35)	Bromoform	17.98	173.0	21943	51.66	ug/L	97
36)	*Chlorobenzene-d5	16.07	117.0	163038	50.00	UG/L	
37)	2-Hexanone	13.91	43.0	59982	44.18	ug/L	
38)	4-Methyl-2-Pentanone	12.36	43.0	133428	41.05	UG/L	75
39)	Tetrachloroethene	14.59	164.0	54498	47.30	ug/L	0
40)	1,1,2,2-Tetrachloroethane	18.24	83.0	46811	35.61	UG/L	97
41)	Toluene	13.32	91.0	243852	47.66	ug/L	91
42)	Toluene d-8	13.22	98.0	218861	48.17	UG/L	92
43)	Chlorobenzene	16.15	112.0	142058	48.14	ug/L	0

Operator ID: MANAGER Quant Rev: 7 Quant Time: 011402 12:02
Output File: ^CS099::QT Injected at: **-**-** 11:44
Data File: >CS099::03 Dilution Factor: 1.00000
Name: VSTD050 Instrument ID: 2001 C
Misc: 2001C

ID File: IDL91C::1
Title: HP VOA Continuing Calibration Standard
Last Calibration: 011402 07:19 Last Cal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
45)	Styrene	17.26	104.1	199366	48.89	UG	94
46)	m,p-Xylenes	16.36	106.0	178628	97.45	UG	9
47)	o-Xylene	17.23	106.1	116102	49.39	UG	87
48)	Bromofluorobenzene	18.42	95.0	92215	46.68	UG	9
49)	1,3-Dichlorobenzene	20.69	146.0	89912	41.89	UG	98
50)	1,4-Dichlorobenzene	20.87	146.0	93475	47.02	UG	97
51)	1,2-Dichlorobenzene	21.66	146.1	87902	38.55	UG	91

* Compound is ISTD

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 01:423 11:44
Output File: 'CS099::QT Injected at: **0407 11:44
Data File: >CS099::D3 Dilution Factor: 1.000000
Name: VSTD050 Instrument ID: 7001 C
Misc: 7001C

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **0409 10:46

	Compound	R.T.	Q ion	Area	Conc	Units	n
1)	*Bromochloromethane	9.08	128.0	17690	50.00	UG	84
2)	Freon 113	5.68	101.0	28498	47.70	UG	86

* Compound is ISTD

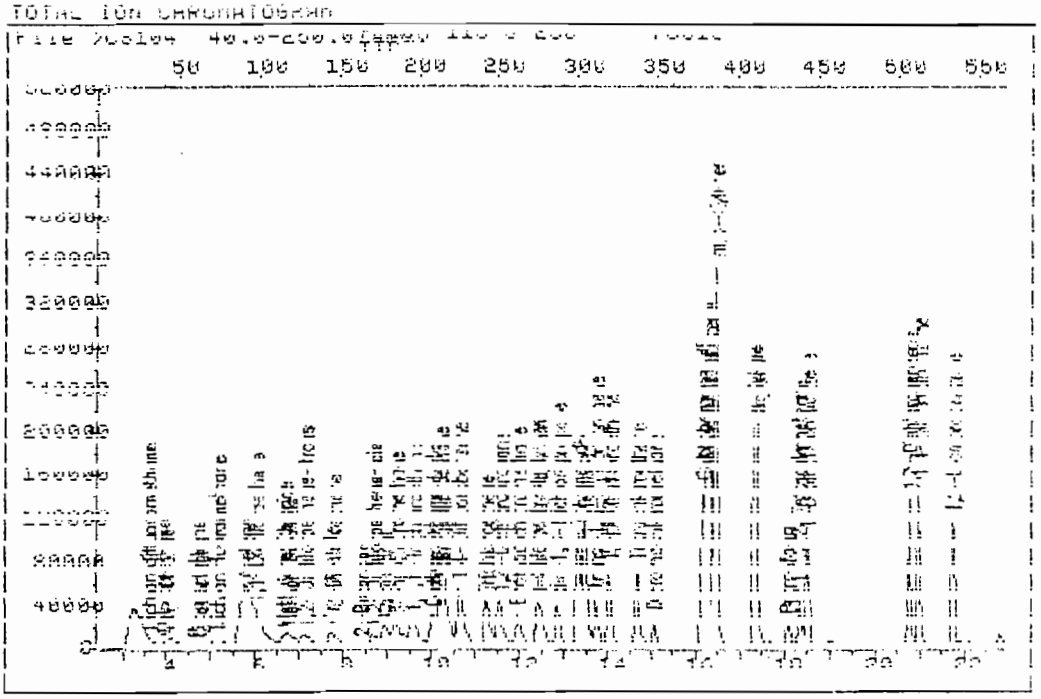
7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Instrument ID: H5970 C Calibration Date: 04/09/01 Time: 11:44
Lab File ID: CS104 Init. Calib. Date(s): 03/30/01 03/30/01
Heated Purge: (Y/N) N Init. Calib. Times: 11:52 13:50
GC Column: RTX502.2 ID: .32 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D	
Chloromethane	.410	.468		-14.1		
Bromomethane	.465	.360	.100	22.6	25.0	
Vinyl Chloride	.697	.819	.100	-17.5	25.0	
Chloroethane	.619	.454		26.7		
Methylene Chloride	1.146	1.060		7.5		
Acetone	1.030	1.215		-18.0		
Carbon Disulfide	4.834	4.314		10.8		
1,1-Dichloroethene	.951	1.028	.100	-8.1	25.0	
1,1-Dichloroethane	3.046	3.229	.200	-6.0	25.0	
1,2-Dichloroethene-trans	1.044	1.091		-4.5		
Chloroform	5.396	5.071	.200	6.0	25.0	
1,2-Dichloroethane	5.741	7.111	.100	-23.9	25.0	
2-Butanone	1.970	1.095		44.4		
1,1,1-Trichloroethane	.544	.510	.100	6.3	25.0	
Carbon Tetrachloride	.387	.264	.100	31.8	25.0	
Bromodichloromethane	.556	.515	.200	7.4	25.0	
1,2-Dichloropropane	.485	.514		-6.0		
cis-1,3-Dichloropropene	.705	.723	.200	-2.6	25.0	
Trichloroethene	.279	.306	.300	-9.7	25.0	
Dibromochloromethane	.286	.221	.100	22.7	25.0	
1,1,2-Trichloroethane	.290	.319	.100	-10.0	25.0	
Benzene	1.436	1.524	.500	-6.1	25.0	
trans-1,3-Dichloropropene	.623	.698	.100	-12.0	25.0	
Bromoform	.141	.106	.100	24.8	25.0	
4-Methyl-2-Pentanone	.997	.994		.3		
2-Hexanone	.416	.493		-18.5		
Tetrachloroethene	.223	.227	.200	-1.8	25.0	
1,1,2,2-Tetrachloroethane	.403	.335	.500	16.9	25.0	
Toluene	1.569	1.708	.400	-8.9	25.0	
Chlorobenzene	.905	.938	.500	-3.6	25.0	
Ethylbenzene	.491	.514	.100	-4.7	25.0	
Styrene	1.251	1.132	.300	9.5	25.0	
Toluene d-8	1.387	1.379		.6		
Bromofluorobenzene	.606	.581	.200	4.1	25.0	
1,2-Dichloroethane-d4	4.658	5.199		-11.6		
1,2-Dichloroethene-cis	3.888	3.180		18.2		
m,p-Xylenes	.586	.643		-9.7		
o-Xylene	.721	.670	.010	7.1	25.0	
Freon 113	1.462	1.689		15.5		cs102

All other compounds must meet a minimum RRF of .010.

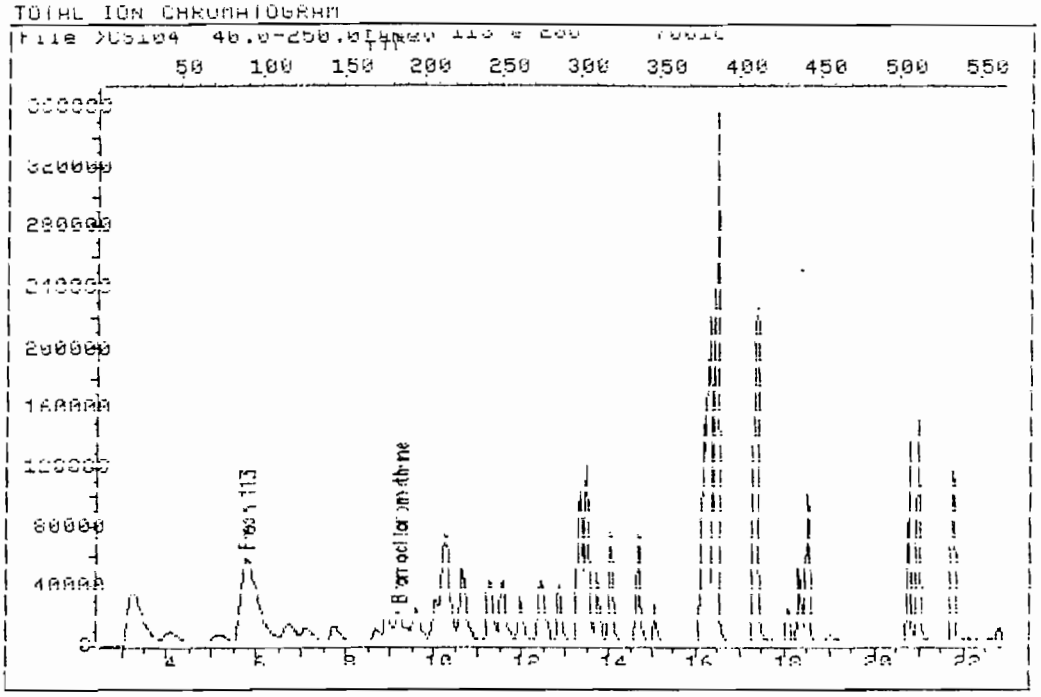


Data File: >CS1@4::D3 Quant Output File: ^CS1@4::QT
Name: freon 113 @ 70ug Sa Instrument ID: >@@1 :.
Misc: 70ulc

Id File: ID@4IC::.:
Title: HP V@A Continuing Calibration Standard
Last Calibration: @1@4@7 @7:19 Last Cal Time: <none>

Operator ID: MANAGER
Quant Time : @1@4@9 12:..
Injected at: **@4@9 11:44

TOTAL ION CHROMATOGRAM



Data File: >CS104::03
Name: freon 113 @ 200-500
Misc: 7001c

Quant Output File: 'CS104::QT
Instrument ID: 7001 C

Id File: IDF113::M1
Title: Freon 113 ID File
Last Calibration: :

Last Qcal Time: <none>

Operator ID: MANAGER
Quant Time : 010493 11:>>
Injected at: **0409 11:44

Operator ID: MANAGER Quant Rev: 7 Quant Time: 011-09 17:08
Output File: ^CS104::QT Injected at: **0409 11:44
Data File: , >CS104::03 Dilution Factor: 1.00000
Name: freon 113 @ ~~200~~ 500 Instrument ID: 7000 C
Misc: 7000c

ID File: IDC91C::MT
Title: HP 600A Continuing Calibration Standard
Last Calibration: 010402 07:19 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	*Bromochloromethane	9.18	128.0	16928	50.00	ug	
2)	Chloromethane	3.92	50.0	2941M	52.09	UG	29
3)	Bromomethane	4.67	94.0	611?M	58.69	ug	
4)	Vinyl Chloride	3.99	62.0	13910M	58.28	UG	99
5)	Chloroethane	4.24	64.0	2709	56.65	ug	
6)	Methylene Chloride	6.66	84.0	17996	46.23	UG	0
8)	Acetone	5.29	43.0	20852	58.97	ug	
11)	Trichlorofluoromethane	5.14	101.0	50191	69.98	UG	
12)	Carbon Disulfide	6.77	76.0	73258	44.61	ug	100
13)	1,1-Dichloroethene	6.01	96.0	17449	54.01	UG	85
14)	1,1-Dichloroethane	7.48	63.0	54817	52.99	ug	
15)	1,2-Dichloroethene-trans	7.13	96.0	18516	52.21	UG	99
17)	1,2-Dichloroethene-cis	8.68	61.0	53992	41.90	ug	
18)	Chloroform	8.93	83.0	86893	46.98	UG	99
19)	1,2-Dichloroethane-d4	10.05	65.0	88226	55.82	ug	
20)	1,2-Dichloroethane	10.19	62.0	121729	61.93	UG	93
21)	2-Butanone	8.39	43.0	18986	22.28	ug	
22)	*1,4-Difluorobenzene	10.62	114.0	154786	50.00	UG	96
23)	1,1,1-Trichloroethane	9.98	97.0	28986	46.89	ug	
24)	Carbon Tetrachloride	10.01	117.0	41844M	34.17	UG	92
25)	Vinyl Acetate	7.20	43.0	74142	35.56	ug	
26)	Bromodichloromethane	11.96	83.0	29699	46.25	UG	92
27)	1,2-Dichloropropane	11.56	63.0	79579	53.14	ug	
28)	cis-1,3-Dichloropropene	12.86	75.0	111941	51.28	UG	82
29)	Trichloroethene	11.24	130.0	47414	54.92	ug	
30)	Dibromochloromethane	15.06	129.0	34271	38.68	UG	95
31)	1,1,2-Trichloroethane	14.85	97.0	49316	54.96	ug	
32)	Benzene	10.26	78.0	259826	53.06	UG	99
33)	trans-1,3-Dichloropropene	13.73	75.0	108108	56.19	ug	
34)	2-Chloroethylvinylether	12.39	63.0	40864	53.64	UG	92
35)	Bromoform	18.06	173.0	16479M	32.52	ug	
36)	*Chlorobenzene-d5	16.14	117.0	166942	50.00	UG	
37)	2-Hexanone	14.02	43.0	82361	59.24	ug	
38)	4-Methyl-2-Pentanone	12.46	43.0	169910	49.85	UG	73
39)	Tetrachloroethene	14.66	164.0	37926	51.91	ug	
40)	1,1,2,2-Tetrachloroethane	18.31	83.0	55973	41.58	UG	99
41)	Toluene	13.47	91.0	289149	54.42	ug	400
42)	Toluene d-8	13.33	98.0	231126	49.69	UG	90
43)	Chlorobenzene	16.22	112.0	120053	51.85	ug	

Operator ID: MANAGER Quant Rev: 7 Quant Time: 011489 12:08
Output File: ^CS104::QT Injected at: **-89 11:-4
Data File: >CS104::03 Dilution Factor: 1.00000
Name: freon 113 @ 200 Instrument ID: 200: C
Misc: 200ic

ID File: 100.91C::m
Title: HP VOA Continuing Calibration Standard
Last Calibration: 011402 07:19 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
45)	Styrene	17.57	104.0	189029	45.22	UG	94
46)	m,p-Xylenes	16.43	106.0	214759	109.68	UG	9
47)	o-Xylene	17.30	106.0	111864	46.48	UG	88
48)	Bromofluorobenzene	18.49	95.0	97180	47.98	UG	94
49)	1,3-Dichlorobenzene	20.26	146.0	99148	45.07	UG	99
50)	1,4-Dichlorobenzene	20.98	146.0	101388	44.51	UG	94
51)	1,2-Dichlorobenzene	21.24	146.0	92666	39.67	UG	99
52)	Dichlorodifluoromethane	5.59	85.0	5005	8.12	UG	9

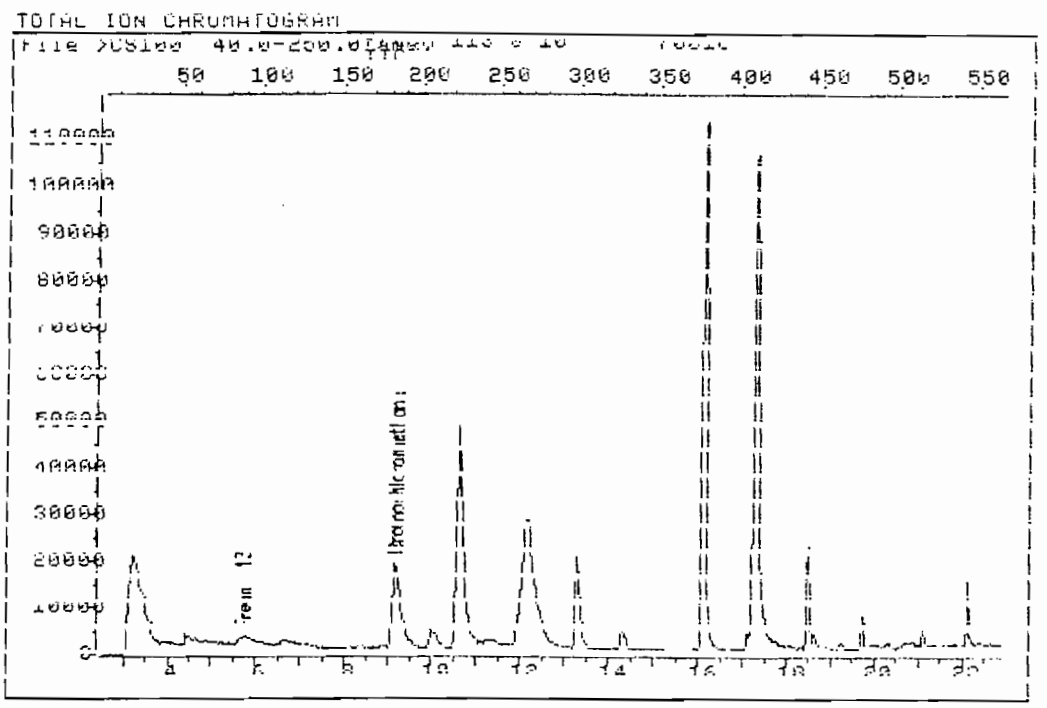
* Compound is ISTD

Operator ID: MANAGER Quant Rev: 7 Quant Time: 01 423 11: 9
Output File: 'CS104::QT Injected at: **0409 11:44
Data File: >CS104::03 Dilution Factor: 1.0000
Name: freon 113 @ ~~200~~ 500 Instrument ID: 7001 C
Misc: 7001c

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.18	128.0	16?2?	?0.00	ug	1
2)	Freon 113	5.75	101.0	23?279M	475.55	UG	99

* Compound is ISTD



Data File: >CS100::03
Name: freon 113 @ 10
Misc: 7001c

Quant Output File: ^CS100::QT
Instrument ID: 001

Id File: IDF113::
Title: Freon 113 ID File
Last Calibration: :

Last Qcal Time: <none>

Operator ID: MANAGER
Quant Time : 01047 11:
Injected at: **0409 09:46

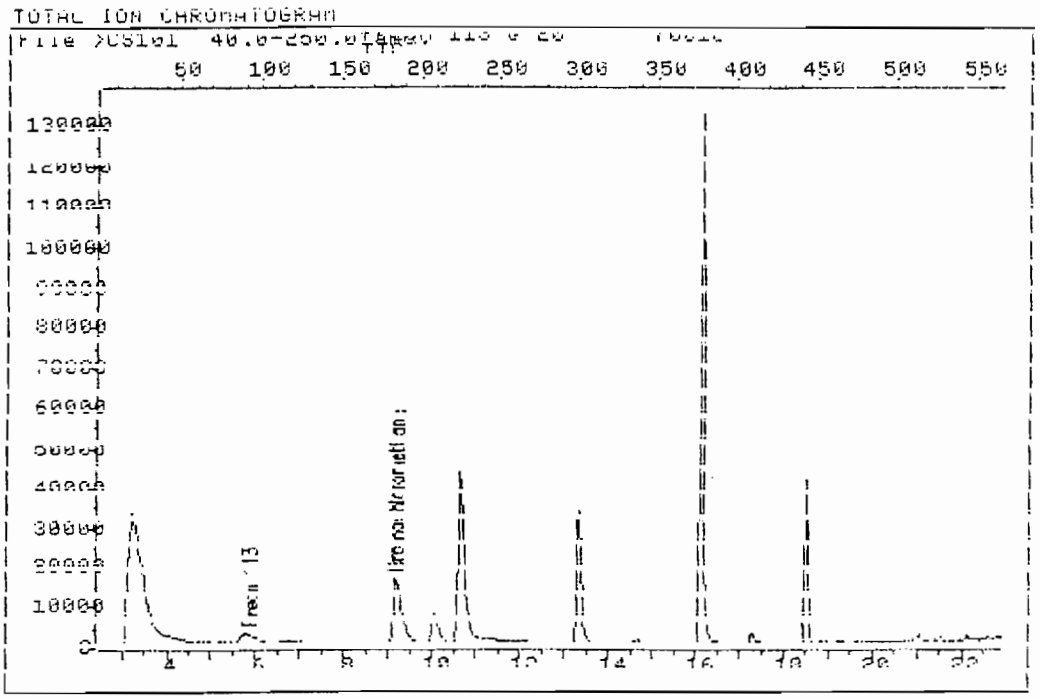
QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 01 -23 11: 7
Output File: ^CS100::QT Injected at: **0409 09:46
Data File: >CS100::D3 Dilution Factor: 1.0000
Name: freon 113 @ 10 Instrument ID: 7001 C
Misc: 7001c

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.14	128.0	18946	50.00	UG	91
2)	Freon 113	5.72	101.0	5400	9.59	UG	92

* Compound is ISTD



Data File: >CS101::D3 Quant Output File: ^CS101::QT
Name: freon 113 @ 20 Instrument ID: 7001 L
Misc: 7001c

Id File: IDF113::D
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: <none>

Operator ID: MANAGER
Quant Time : 010423 11:
Injected at: **0409 10:16

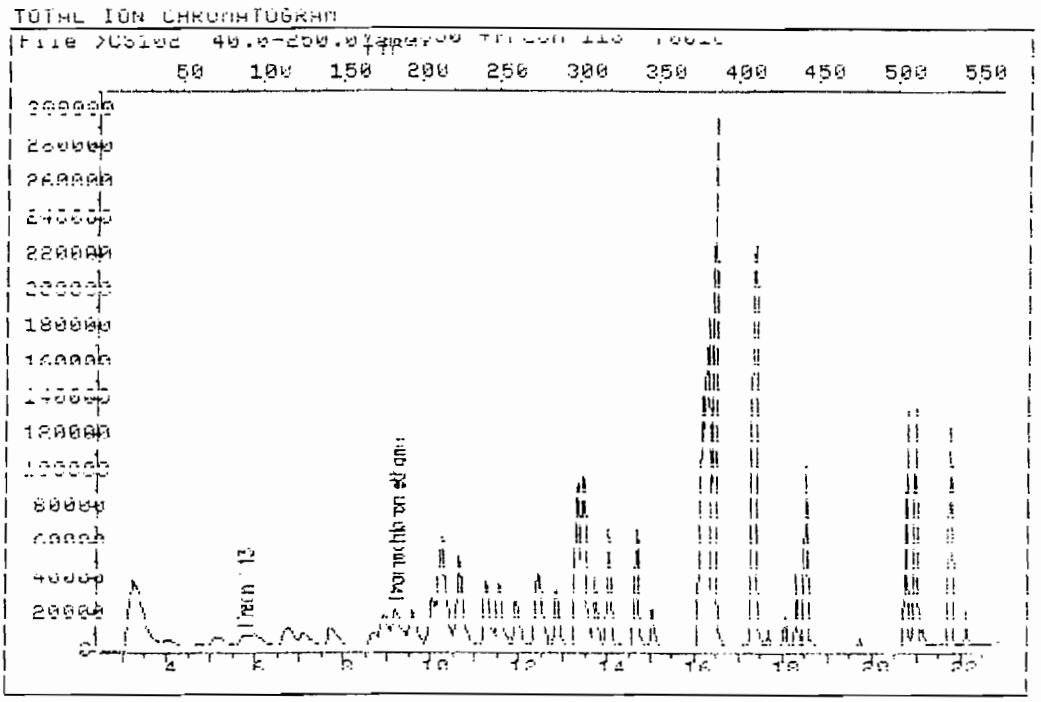
QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 01-23-[illegible]
Output File: ^CS101::QT Injected at: **0409 10:16
Data File: >CS101::D3 Dilution Factor: 1.0000
Name: freon 113 @ 20 Instrument ID: 7001 C
Misc: 7001c

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	n
1)	*Bromochloromethane	9.14	128.0	16749	50.00	UG	[illegible]
2)	Freon 113	5.86	101.0	9481M	19.04	UG	90

* Compound is ISTD



Data File: >CS102::03
Name: vstd150 +freon 113
Misc: 7001c

Quant Output File: ^CS102::QT
Instrument ID: 001

Id File: IDF113::M1
Title: Freon 113 ID File
Last Calibration: :

Last Qcal Time: <none>

Operator ID: MANAGER
Quant Time : 010423 11:1>
Injected at: **0409 10:45

QUANT REPORT Page 1

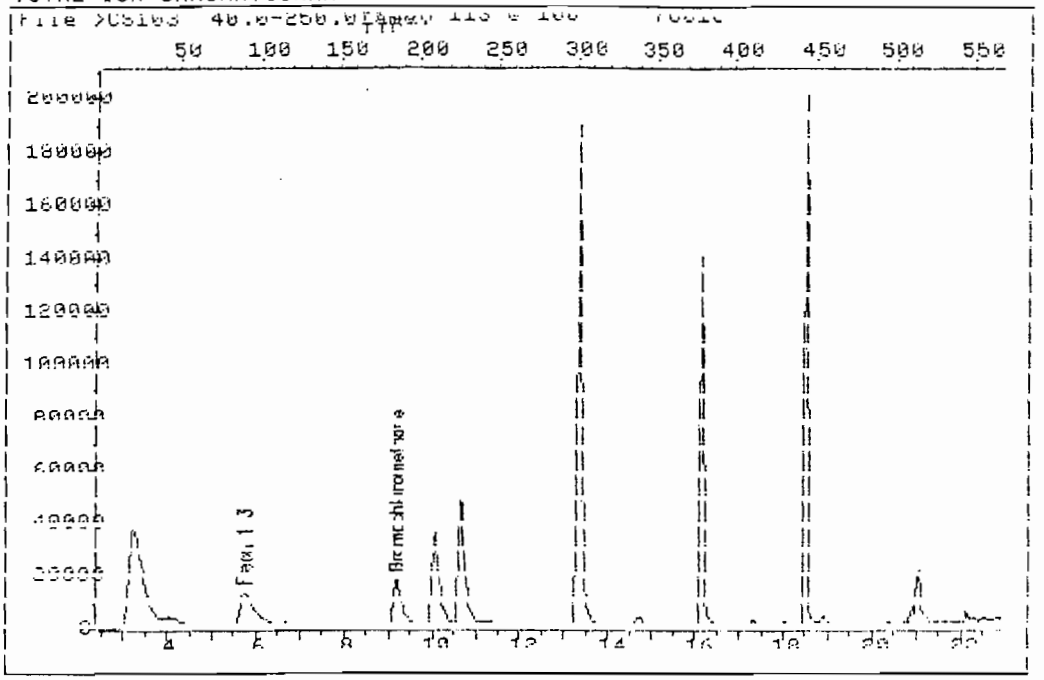
Operator ID: MANAGER Quant Rev: 7 Quant Time: 01[illegible]23 11:[illegible]
Output File: ^CS102::QT Injected at: **0409 10:45
Data File: >CS102::D3 Dilution Factor: 1.000000
Name: vstd050 +freon 113 Instrument ID: 7001 C
Misc: 7001c

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	n
1)	*Bromochloromethane	9.18	128.0	17755	50.00	UG	AM
2)	Freon 113	5.75	101.0	29982	56.29	UG	AS

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >CS103::03
Name: freon 113 @ 100
Misc: 7001c

Quant Output File: ^CS103::QT
Instrument ID: >001

Id File: FUF113::MT
Title: Freon 113 ID File
Last Calibration: :

Last Cal Time: <none>

Operator ID: MANAGER
Quant Time : 01042? 11:??
Injected at: **0409 11:15

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: / Quant Time: 01-Apr-23 11:5
Output File: ^CS103::QT Injected at: **0409 11:15
Data File: >CS103::D3 Dilution Factor: 1.000
Name: freon 113 @ 100 Instrument ID: 7001 C
Misc: 7001c

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.15	128.0	17089	50.00	UG	97
2)	Freon 113	5.23	101.0	46692	91.92	UG	95

* Compound is ISTD

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Lab File ID (Standard): CS098 Date Analyzed: 04/06/01
Instrument ID: H5970 C Time Analyzed: 09:53
GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA	#	RT	#	IS2(DFB) AREA	#	RT	#	IS3(CBZ) AREA	#	RT	#
	12 HOUR STD	15689.		9.11		135241.		10.59		150387.		16.07	
	UPPER LIMIT	31378.		9.61		270482.		11.09		300774.		16.57	
	LOWER LIMIT	7845.		8.61		67621.		10.09		75194.		15.57	
	EPA SAMPLE NO.												
1	VBLK01	15334.		9.15		115101.		10.59		134854.		16.11	
2	MW-3(1)	14759.		9.13		121882.		10.61		140113.		16.12	
3	MW-8(1)	15954.		9.14		123973.		10.62		144438.		16.14	
4	MW-4(2)	17109.		9.18		124314.		10.62		138442.		16.13	
5	MW-5(2)	16195.		9.18		128197.		10.66		146523.		16.14	
6	EB033001	17071.		9.18		131180.		10.65		148642.		16.13	
7	MW-7(2)	18061.		9.21		128381.		10.65		144430.		16.17	
8	MW-9(2)	18132.		9.17		134208.		10.65		152671.		16.17	
	MW-3(3)	18043.		9.18		134591.		10.65		146756.		16.17	
	MW-8(3)	18605.		9.18		129783.		10.66		144620.		16.17	
11	DUP033001	17284.		9.18		128800.		10.66		142131.		16.17	
12	MW-6(2)	15811.		9.21		111330.		10.66		123530.		16.17	
13	TB033001	17886.		9.21		125570.		10.65		140065.		16.17	
14	MW-8(2)	18211.		9.21		114671.		10.66		122677.		16.17	
15	MW-3(2)	18381.		9.21		135041.		10.66		148415.		16.17	
16													
17													
18													
19													
20													
21													
22													

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Lab File ID (Standard): CS099 Date Analyzed: 04/07/01
Instrument ID: H5970 C Time Analyzed: 11:44
GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	17875.	9.07	150194.	10.55	163038.	16.07
	UPPER LIMIT	35750.	9.57	300388.	11.05	326076.	16.57
	LOWER LIMIT	8938.	8.57	75097.	10.05	81519.	15.57
	EPA SAMPLE NO.						
1	VBLK02	16185.	9.10	123637.	10.58	144512.	16.10
2	MW-8(3) DL	15350.	9.14	119787.	10.58	135459.	16.10
3	DUP033001 DL	16504.	9.14	118773.	10.58	134900.	16.10
4	MW-8(2) DL	15060.	9.14	113439.	10.58	129791.	16.10
5	MW-9(2) MS	17206.	9.11	136348.	10.58	146485.	16.10
6	MW-9(2) MSD	16980.	9.14	128785.	10.58	142224.	16.10
7	VMSB	16665.	9.14	130209.	10.58	140216.	16.10
8							
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21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Lab File ID (Standard): CS104 Date Analyzed: 04/09/01
Instrument ID: H5970 C Time Analyzed: 11:44
GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	16978.	9.18	154786.	10.62	166947.	16.14
	UPPER LIMIT	33956.	9.68	309572.	11.12	333894.	16.64
	LOWER LIMIT	8489.	8.68	77393.	10.12	83474.	15.64
	EPA SAMPLE NO.						
1	VBLK03	16294.	9.19	132286.	10.63	152519.	16.15
2	MW-8(1) DL	16131.	9.18	128594.	10.66	148829.	16.17
3	MW-1(2)	17250.	9.18	137583.	10.66	155843.	16.14
4	MW-2(2)	22110.	9.18	157950.	10.66	180308.	16.16
5							
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17							
18							
19							
20							
21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

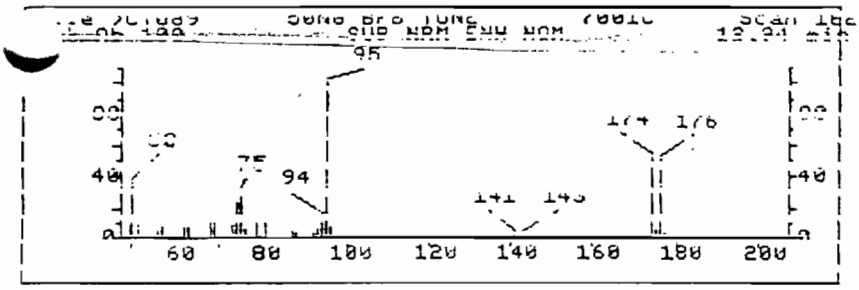
RAW QC

DATA

MS data file header from : >CT089::D3

Sample: SONG RFB TUNE Operator: MANAGER SUPER GRP. >/30/81 11:>
Misc : 7001C
Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS # : 0. Equip ID: 7001-C
Method file: METHCT Tuning file: MI>003 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	90.	230.	230.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0



>CT089 SUNG BFB TUNE 7UNIC
182 SUB NRM ENH NUM

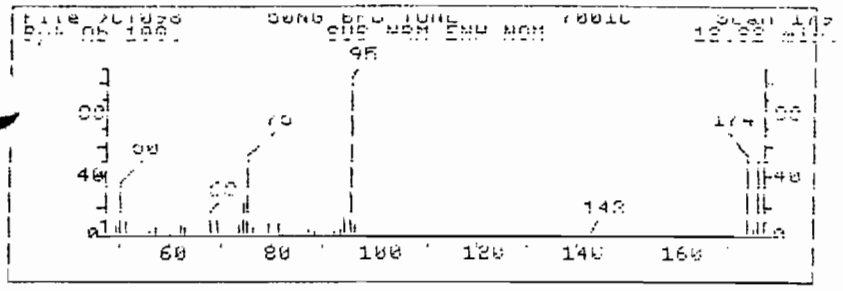
File: >CT089 Scan #: 182 Retn. time: 17.94

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
47.10	1.705	62.05	7.971	75.10	30.696	87.05	4.148	140.[illegible]	1.[illegible]
49.10	8.545	63.05	6.967	76.10	5.614	88.05	3.727	143.05	1.505
50.00	36.786	68.10	15.086	77.10	1.183	92.05	3.677	173.[illegible]	51.[illegible]
51.15	10.372	69.10	14.951	78.95	10.741	93.10	5.701	175.05	4.618
55.05	1.161	70.10	1.405	80.05	2.540	94.10	13.8[illegible]	175.[illegible]	49.[illegible]
56.05	4.053	73.10	8.215	80.95	10.628	95.10	100.000	176.95	3.570
57.05	7.019	74.10	23.518	81.95	2.096	96.10	7.[illegible]	207.[illegible]	1.[illegible]
60.05	2.261								

MS data file header from : >CT098::D3

Sample: 50NG MFB TUNE Operator: MANAGER SUPER GRP. 4/[illegible]/11 9:[illegible]
Misc : 7001C
Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7011 C
Method file: METHCT Tuning file: M19103 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	90.	230.	230.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0



>CT098 50NG BFB TUNE 70010
179 SUB NRM ENH NUM

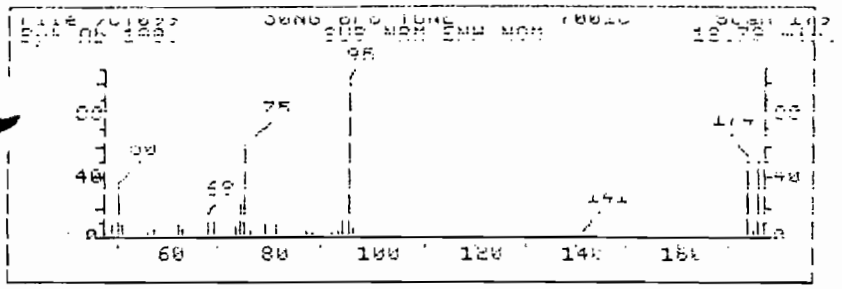
File: >CT098 Scan #: 179 Retn. time: 12.82

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
47.10	1.691	60.05	1.835	74.10	22.587	81.95	1.885	96.10	7.514
49.10	8.004	62.05	7.955	75.10	50.576	87.05	4.112	141.05	1.227
50.00	32.747	63.05	6.280	76.10	5.423	88.05	3.984	142.95	1.299
51.15	9.548	68.10	14.124	77.00	1.034	92.05	3.520	173.95	51.375
55.05	1.256	69.10	13.792	78.95	9.588	93.10	5.162	175.05	4.584
56.05	3.637	70.10	1.501	79.95	2.208	94.10	14.203	175.95	49.527
57.05	6.549	73.10	7.059	80.95	9.578	95.10	100.000	176.95	5.514

MS data file header from : >C1099::D3

Sample: 50NG HFB TUNE Operator: MANAGER SUPER GRP. 4/0 01 11: M
Misc : 70017C
Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7011 C
Method file: METHLT Tuning file: MIY003 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	90.	250.	250.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	.1	0.0	.2	0.0



>CT099 SUNG BFB TUNE 70010
179 SUB NRM ENH NOM

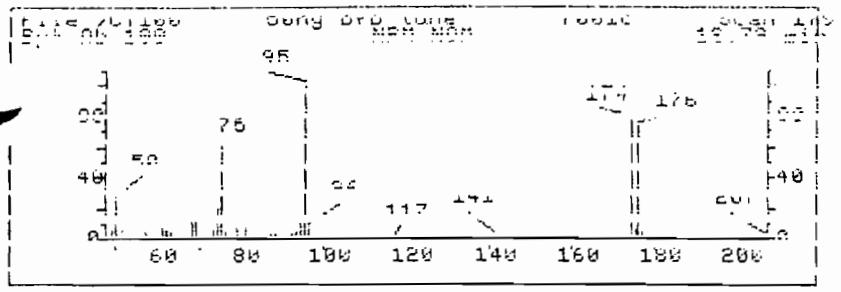
File: >CT099 Scan #: 179 Retn. time: 12.79

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
47.10	2.071	57.05	6.249	73.10	7.142	81.95	1.265	96.10	6.[illegible]8
48.10	1.187	60.05	2.296	74.10	22.651	87.05	4.085	141.05	1.358
49.00	8.310	62.05	8.151	75.10	58.099	88.05	3.742	142.95	1.3[illegible]
50.10	33.381	63.05	6.640	76.10	5.268	92.05	3.757	173.95	50.582
51.05	9.305	68.10	14.952	78.95	8.758	93.10	5.097	175.05	4.[illegible]
55.05	1.270	69.10	14.355	79.95	2.270	94.10	13.682	175.95	50.319
56.05	3.697	70.10	1.318	80.95	9.123	95.10	100.000	176.95	3.7[illegible]

MS data file header from : >C:\100::D3

Sample: 50ng nfb tune Operator: MANAGER SUPER GRP. 4/0 #1 #: 1
Misc : 7001c
Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7001 C
Method file: METHCT Tuning file: MT9003 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	#0.	#>0.	#>0.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	7.0	.1	.0	.2	0.0



>CT100 50ng bfb tune 7001c
179 NRM NUM

File: >CT100 Scan #: 179 Retn. time: 12.79

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
47.10	1.551	60.05	2.116	74.10	19.419	88.05	3.384	140.95	2.0[illegible]
48.10	1.161	61.05	7.754	75.10	56.686	91.05	1.980	142.95	1.600
49.00	6.749	62.05	6.652	76.10	5.362	92.05	3.843	173.95	76.602
50.00	24.978	63.05	5.267	78.95	7.256	93.10	4.701	174.95	6.398
51.15	6.818	68.10	12.767	80.05	2.068	94.10	14.981	175.95	73.003
55.05	1.024	69.10	12.172	80.95	7.637	95.10	100.000	176.95	5.525
56.05	2.643	70.10	1.044	81.95	1.595	96.10	7.412	207.10	1.748
57.05	5.052	73.10	5.969	87.05	4.018	116.95	1.024		

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: VBLK
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: CB098
Level: (low/med) LOW Date Received:
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	2.	J
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	10.	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLK01

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: VBLK
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: CB098
Level: (low/med) LOW Date Received:
% Moisture: not dec._____ Date Analyzed: 04/06/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
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8.					
9.					
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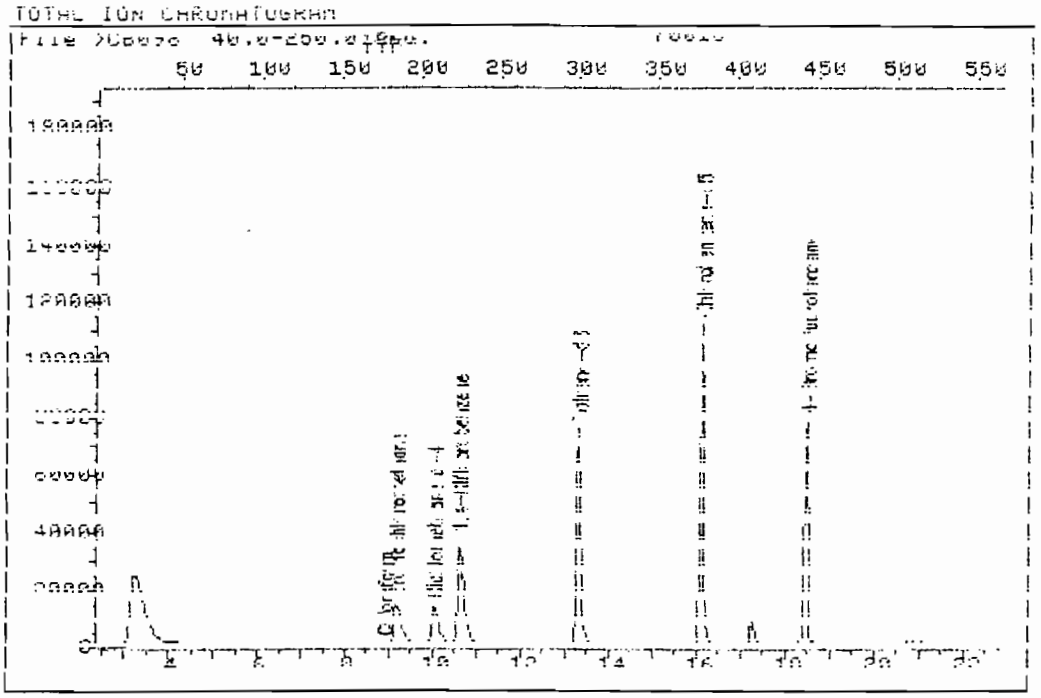
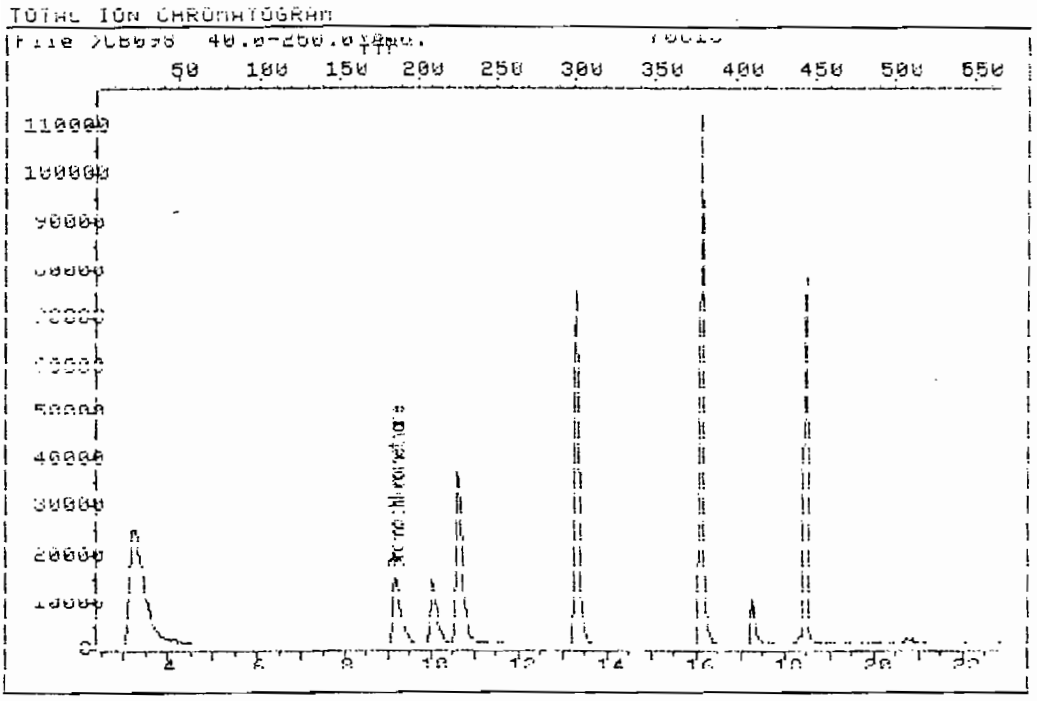
25.					
26.					
27.					
28.					
29.					
30.					



Data File: >CR098::03 Quant Output File: >CR098::QT
Name: VBLK Instrument ID: >001
Misc: 7001C

Id File: ID8?1C::?
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Qcal Time: **0406 09:?

Operator ID: MANAGER
Quant Time : 010406 10:?
Injected at: **0406 10:23



Data File: >CB0198::D5
Name: VBLK
Misc: 7001C

Quant Output File: 'CB0198::QT
Instrument ID: .1001 C

Id File: IDF113::M1
Title: Freon 113 ID File
Last Calibration: :

Last Qual Time: **0406 12:42

Operator ID: MANAGER
Quant Time : 010423 13:58
Injected at: **0406 10:23

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 01:406 10:4A
Output File: ^CB098::QT Injected at: **0406 10:25
Data File: >CB098::03 Dilution Factor: 1.000000
Name: VBLK Instrument ID: 7000 C
Misc: 7001C

Id File: ID591C::MT
Title: HP V0A Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Qcal Time: **0406 09:55

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.15	128.0	15554	50.00	ug	92
18)	Chloroform	8.90	83.0	2932	2.08	UG	89
19)	1,2-Dichloroethane-d4	10.02	65.0	62640	46.14	ug	93
27)	*1,4-Difluorobenzene	10.59	114.0	115101	50.00	UG	96
36)	*Chlorobenzene-d5	16.11	117.0	134854	50.00	ug	94
41)	Toluene d-8	13.30	98.0	162758	50.13	UG	89
48)	Bromofluorobenzene	18.49	95.0	78900	50.52	ug	93

* Compound is ISTD

QUANT REPORT Page 1

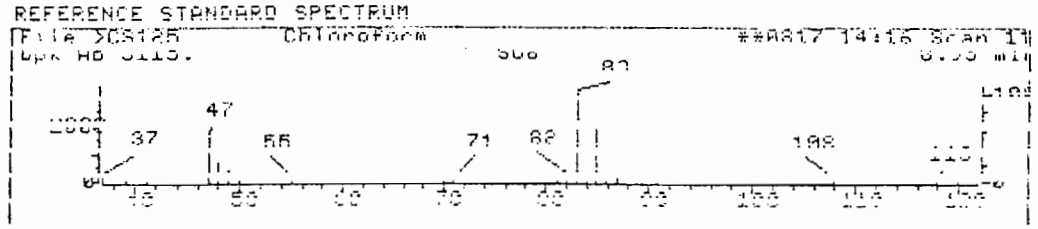
Operator ID: MANAGER Quant Rev: 7 Quant Time: 011423 1::58
Output File: 'CB098::QT Injected at: **1406 10:25
Data File: >CB098::03 Dilution Factor: 1.000000
Name: VBLK Instrument ID: 7001 C
Misc: 7001C

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **1406 15:22

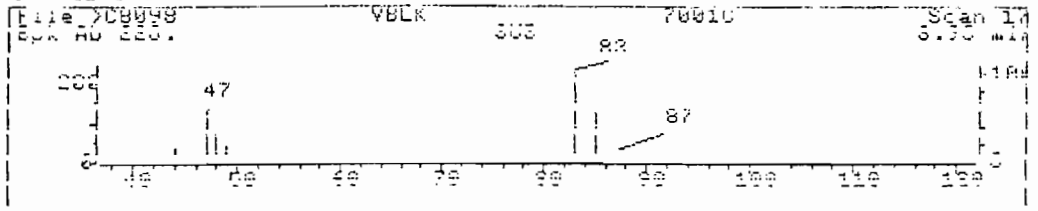
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.15	128.0	15167	50.00	ug	94

* Compound is ISTD

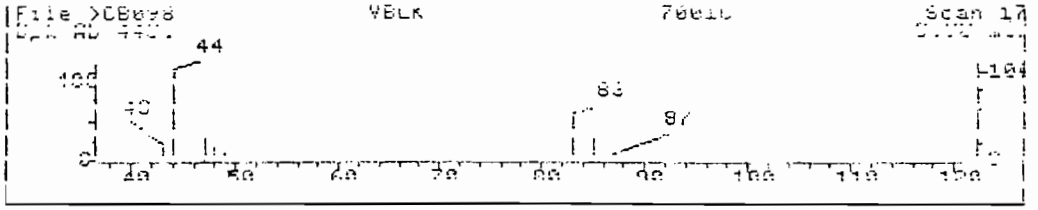
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >CB0198::03
Name: VBLK
Misc: 70010
Quant Time: 010406 10:46
Injected at: **0406 10:23
Last Qcal Time: **0406 09:53

Quant Output File: ^CB0198::QT
Instrument ID: 7.001
Quant ID File: [DS^IC::MT
Last Calibration: 0006:0 08:2

Compound No : 18
Compound Name : Chloroform
Scan Number : 179
Retention Time: 8.90 min.
Quant Ion : 83.0
Area : 2932
Concentration : 2.08
q-value : 89

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: VBLK
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: CB099
Level: (low/med) LOW Date Received:
% Moisture: not dec._____ Date Analyzed: 04/07/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	2.	J
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	10.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK02

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: VBLK
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: CB099
Level: (low/med) LOW Date Received:
% Moisture: not dec._____ Date Analyzed: 04/07/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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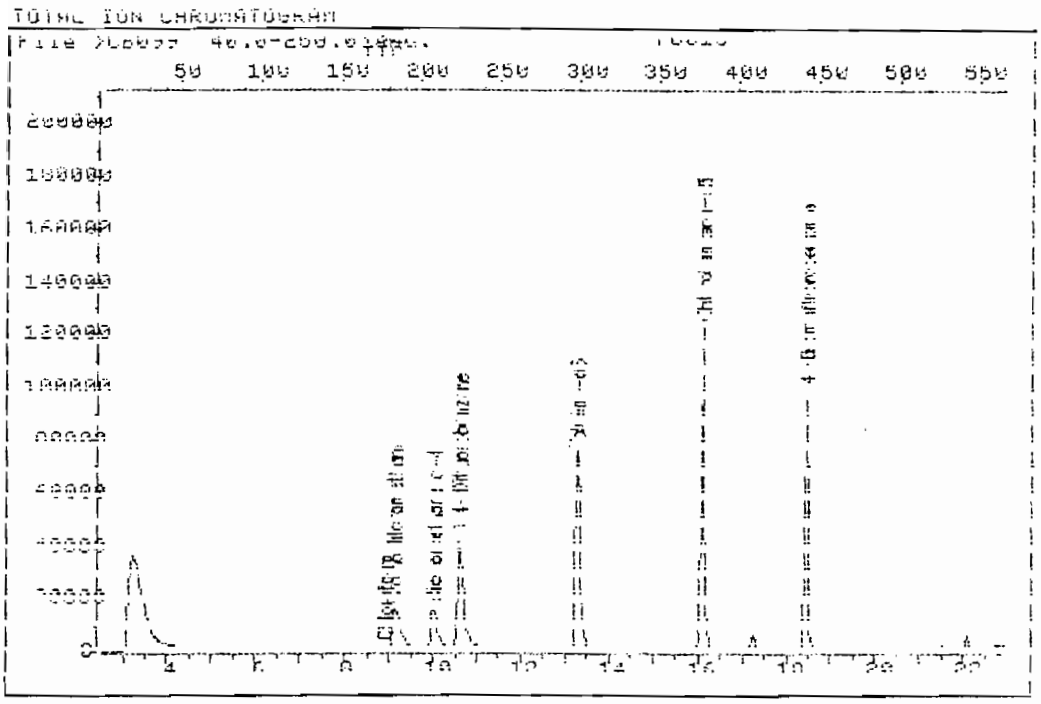
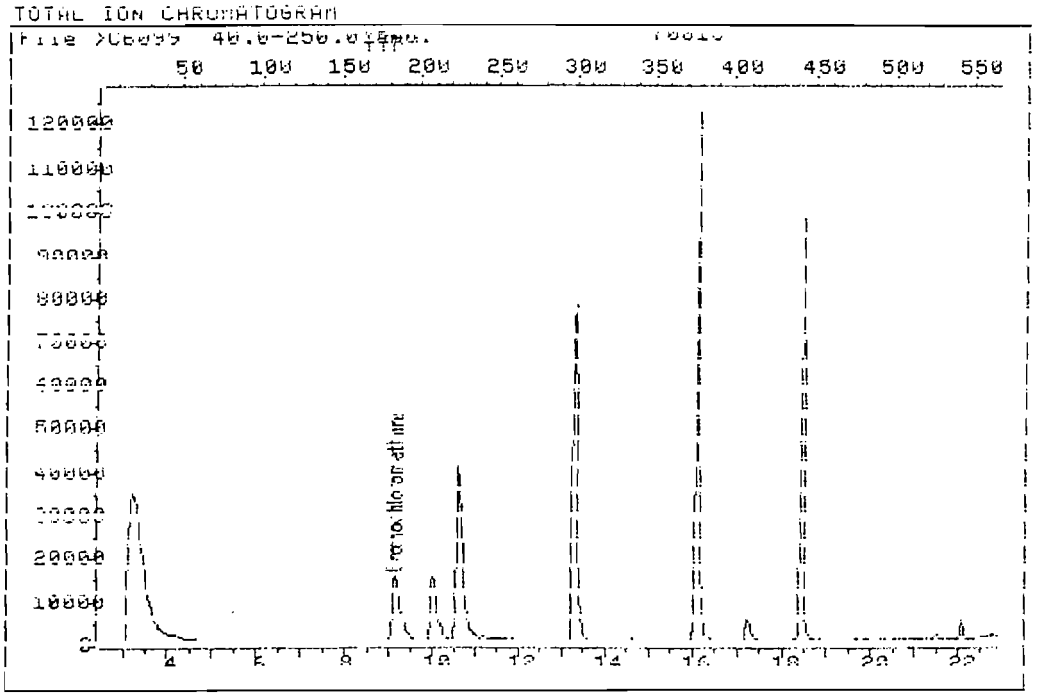


Data File: >CB0199::03 Quant Output File: >CB0199::Q1
Name: VBLK Instrument ID: >401
Misc: 7001C

Id File: ID591C::/
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Qcal Time: **0407 11:-4

Operator ID: MANAGER
Quant Time : 010407 12:1/
Injected at: **0407 12:13



Data File: >CB0199::D3
Name: VBLK
Misc: 7001C

Id File: IDF113::M1
Title: Freon 113 ID File
Last Calibration: :

Operator ID: MANAGER
Quant Time : 010423 11:55
Injected at: **0407 12:13

Quant Output File: 'CB0199::QT
Instrument ID: 7001 C

Last Cal Time: **0407 11:54

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 010407 12:27
Output File: ^CB099::QT Injected at: **0407 12:15
Data File: >CB099::03 Dilution Factor: 1.000000
Name: VBLK Instrument ID: 7001 C
Misc: 7001C

ID File: ID591C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Qcal Time: **0407 11:44

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	*Bromochloromethane	9.10	128.0	16189	50.00	ug	94
18)	Chloroform	8.89	83.0	2993	2.05	UG	99
19)	1,2-Dichloroethane-d4	10.01	65.0	68412	48.59	ug	97
23)	*1,4-Difluorobenzene	10.58	114.0	129637	50.00	UG	96
36)	*Chlorobenzene-d5	16.10	117.0	144912	50.00	ug	97
42)	Toluene d-8	13.25	98.0	129952	47.52	UG	91
48)	Bromofluorobenzene	18.44	95.0	81035	48.96	ug	

* Compound is ISTD

QUANT REPORT Page 1

Operator ID: MANAGER
Output File: 'CB099::QT
Data File: >CB099::03
Name: VBLK
Misc: 7001C

Quant Rev: 7 Quant Time: 010423 11:55
Injected at: **0407 12:13
Dilution Factor: 1.000000
Instrument ID: 7001 C

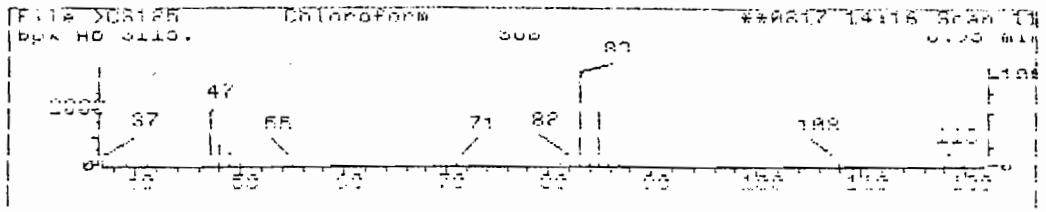
ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: :

Last Qcal Time: **0407 11:44

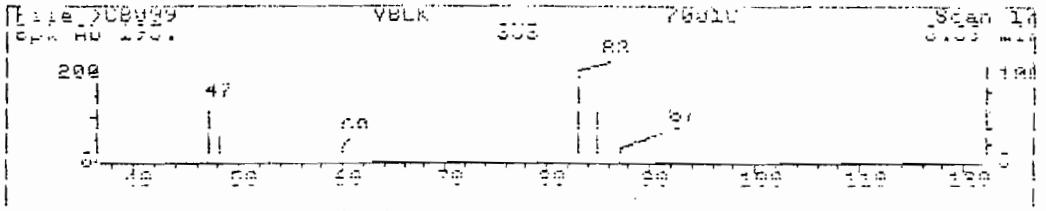
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.10	128.0	16186	50.00	ug	9..

* Compound is ISTD

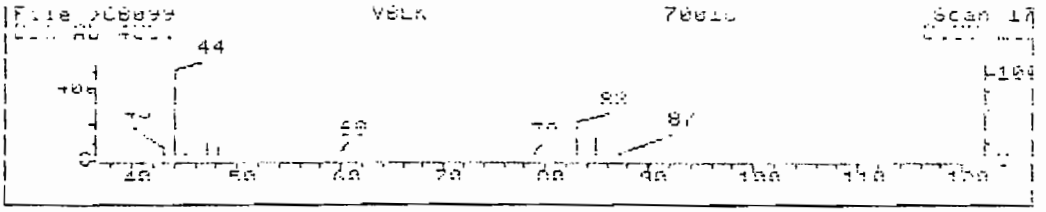
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

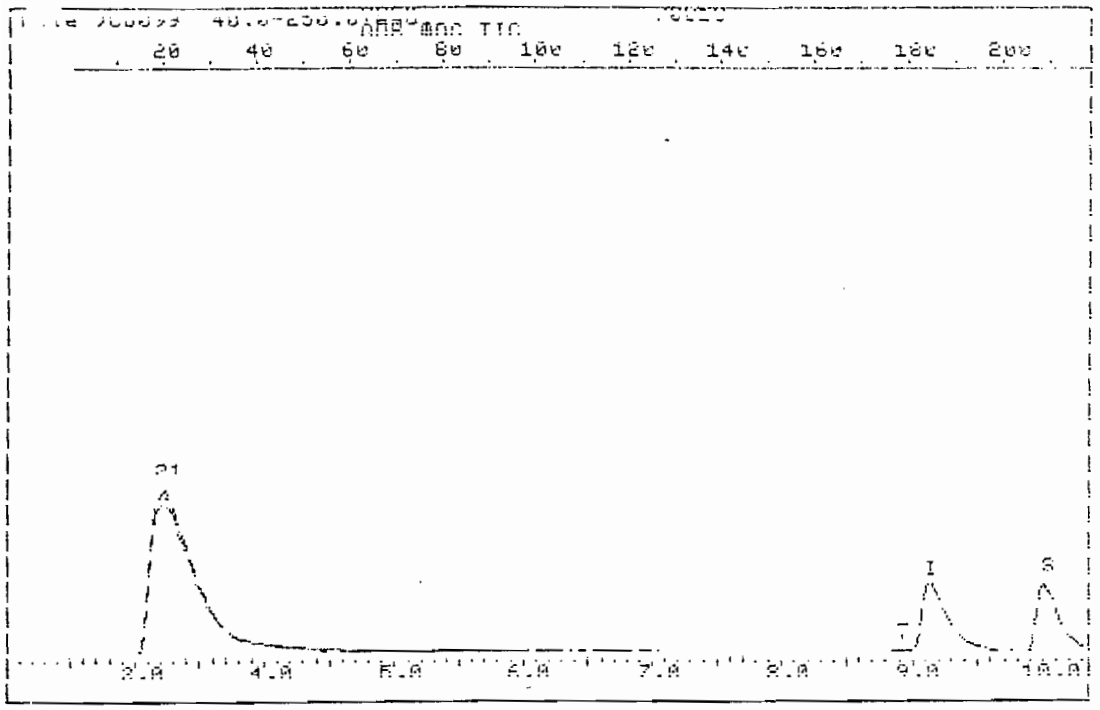


Data File: >CH099::03
Name: VBLK
Misc: 20uIC
Quant Time: 010407 12:57
Injected at: **0407 12:13
Last Qcal Time: **0407 11:44

Quant Output File: >CH099::Q1
Instrument ID: >001
Quant ID File: ID8>1C::MT
Last Calibration: 000>10 0h:>1

Compound No : 18
Compound Name : Chloroform
Scan Number : >78
Retention Time: 8.89 min.
Quant Ion : 8>.0
Area : 2955
Concentration : >.03
q-value : 99

```
MS data file header from : >CB099::03

Sample: VBLK                    Operator: MANAGER   SUPERVISOR.   4/0..01 1?::>
Misc  : 7001C
Sys. #:     1  MS model:  70  SW/HW rev.: LF  ALS # :  0     Equip ID: 7001  C
  Method file: METH03    Tuning file: MT9003   No. of extra records:  2
 Source temp.:   N/A  Analyzer temp.:  N/A      Transfer line temp. :   0

      Chromatographic temperatures :  45.   2?0.   ?50.     0.     0.
      Chromatographic times, min.  :  3.0   35.0   3?.0    0.0    0.0
      Chromatographic rate, deg/min:  8.0     .1     0.0     .2     0.0


>1.B099         VBLK                    70001C
  40.01 250.0 CLP 11C
Upslope:  .2000 Area Reject:    20992. Max Peaks:  2  Bunch: -1 Valley >1000 %
Unslope: 0.0000 Results File 1CB099   Sorted by Time/Area      INT

Peak    R.T.   first    max    last     peak      raw       corr.     corr.     % of
  #     min.   scan    scan   scan     height    area      area     % max.     total
---   ------  -----   -----  -----    ------  --------  --------  --------  --------
  1     3.23      10      21     55    >6:47   94,199    909??3    100.00    95.4 .
  2    17.25     404     410    417     5>25    66903     4>593     4.29     4.574

                          Sum of corrected areas:      95?>96.

        Summary of Unknowns PBM Library Search and Quantitation

                                                 Retention       Unknown
        Standard   Concentration    Area          Time          Window
        --------   -------------  ---------    ---------    ----------------
           1             50.0      209924.       9.10       2.51 -    9.84
           2             50.0      431427.      10.58       9.84 -   1?..4
           3             50.0      621611.      16.10      13.34 -   22.91

    Dilution Factor =     1.00          This sample was 10000.00  ng or mg

  Correction Factor =     1.00

                          |Conc Int Std * Area Unknown|
Unknown Concentration =   |---------------------------| * Correction Factor
                          |       Area Int Std        |

                                                  7:34 PM  MON., 23  APR., 2001
```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160
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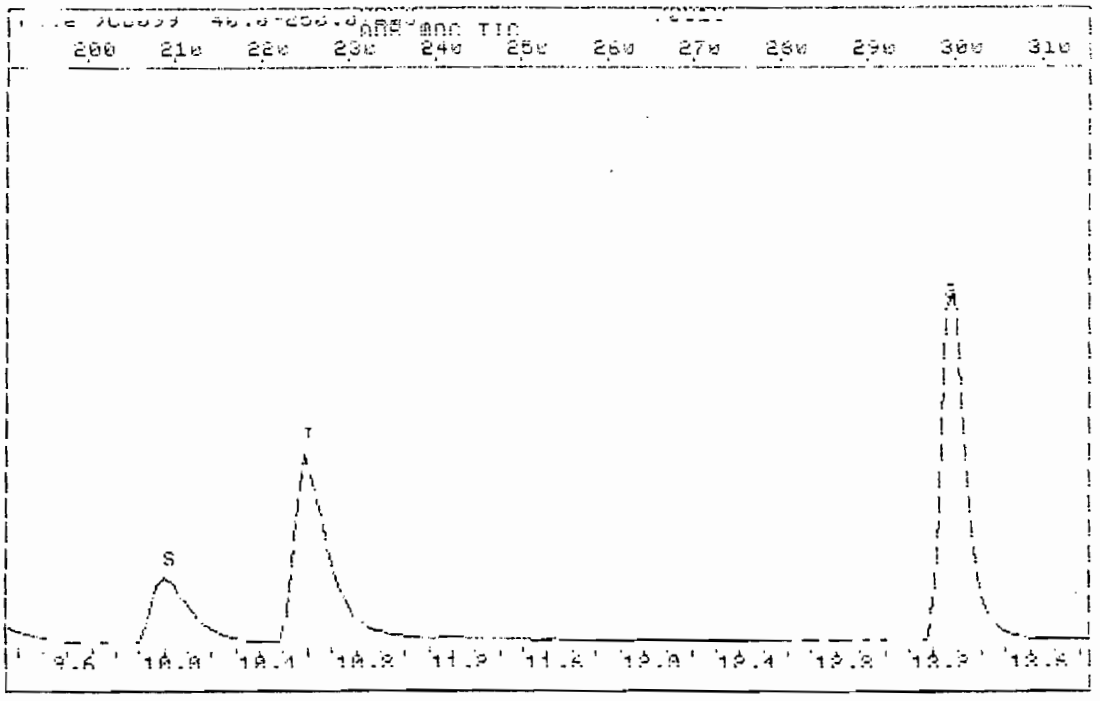
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250
260
270
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290
300
310
S
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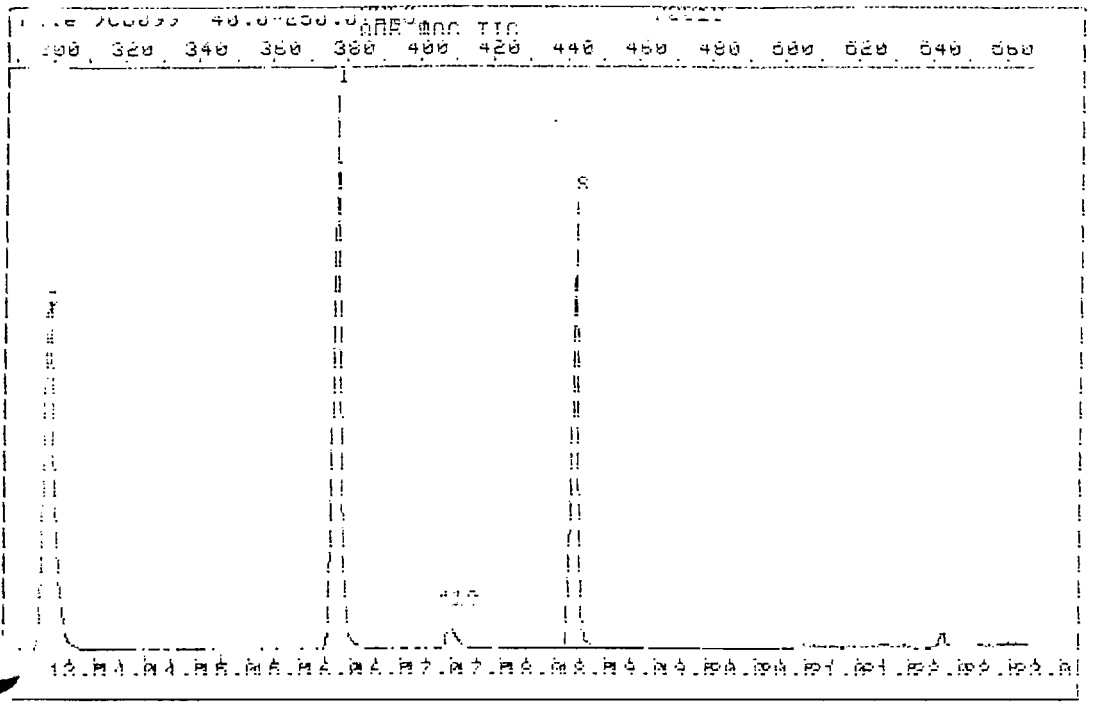
A



Instrument ID: 7001 Analyzed on: 4/11/01 12:15

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK03

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: VBLK
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: CB104
Level: (low/med) LOW Date Received:
% Moisture: not dec._____ Date Analyzed: 04/09/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	2.	J
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	10.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK03

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: VBLK
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: CB104
Level: (low/med) LOW Date Received:
% Moisture: not dec._____ Date Analyzed: 04/09/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
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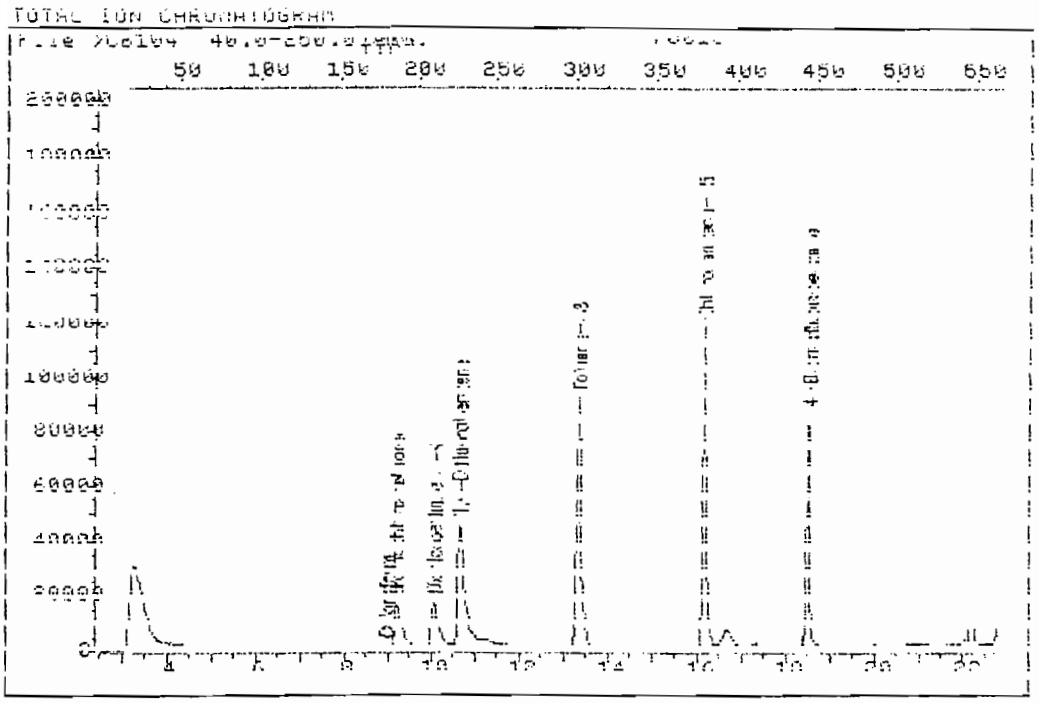
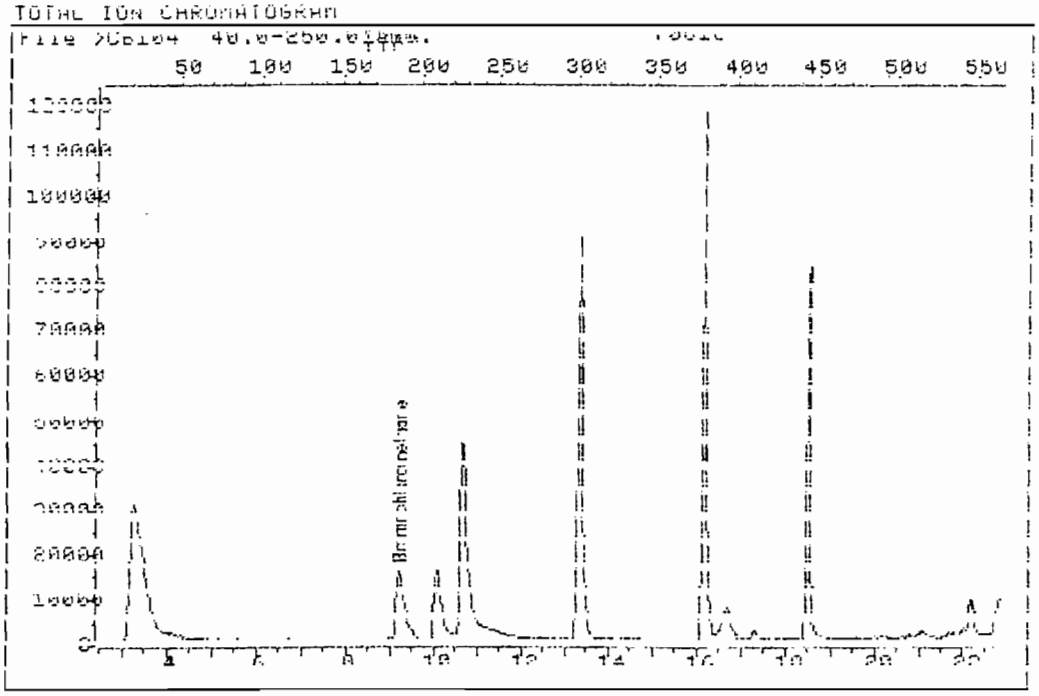


Data File: >CB104::D3 Quant Output File: >CB104::QT
Name: Vblk Instrument ID: >:01 [.
Misc: 700lc

Id File: ID491C::[..
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Qcal Time: **[-:9 1[:-4

Operator ID: MANAGER
Quant Time : 010409 12:[.
Injected at: **0409 12:13



Data File: >CB104::03
Name: volk
Misc: 7001c

Quant Output File: 'CB104::QT
Instrument ID: >001 L

Id File: IDF113::01
Title: Freon 113 ID File
Last Calibration: :

Last Ncal Time: **0409 12:52

Operator ID: MANAGER
Quant Time : 010423 11:47
Injected at: **0409 12:13

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 011-89 17:17
Output File: ^CB104::QT Injected at: **1409 12:15
Data File: >CB104::05 Dilution Factor: 1.0000
Name: vblk Instrument ID: 7881 C
Misc: 78818

ID File: ID591C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:51 Last Qcal Time: **1409 11:44

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.19	128.0	36794	50.000	ug	
16)	Chloroform	8.97	83.0	4887	2.42	ug	95
19)	1,2-Dichloroethane-d4	10.05	65.0	24849	44.17	ug	
22)	*1,4-Difluorobenzene	10.63	114.0	132286	50.000	ug	96
36)	*Chlorobenzene-d5	16.15	117.0	152919	50.000	ug	
42)	Toluene d-8	13.54	98.0	191216	49.59	ug	9
48)	Bromofluorobenzene	18.53	95.0	82180	49.13	ug	

* Compound is ISTD

QUANT REPORT Page 1

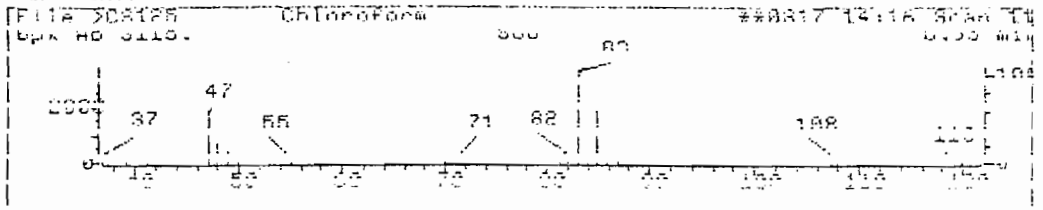
Operator ID: MANAGER Quant Rev: 7 Quant Time: 01:423 11:42
Output File: 'CB104::QT Injected at: **0409 12:13
Data File: >CB104::D3 Dilution Factor: 1.00000
Name: vblk Instrument ID: 7001 C
Misc: 7001c

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **0409 10:45

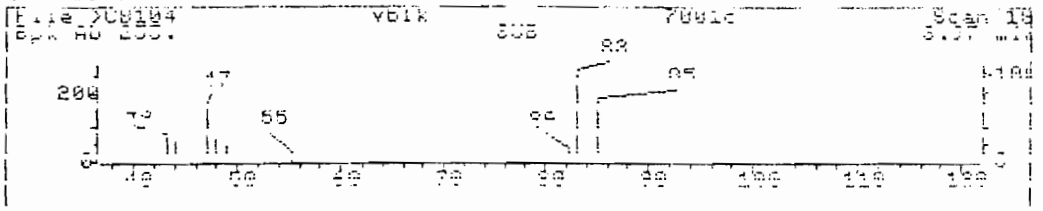
Compound	R.T.	Q ion	Area	Conc	Units	q
1) *Bromochloromethane	9.19	128.0	16745	50.00	ng	

* Compound is ISTD

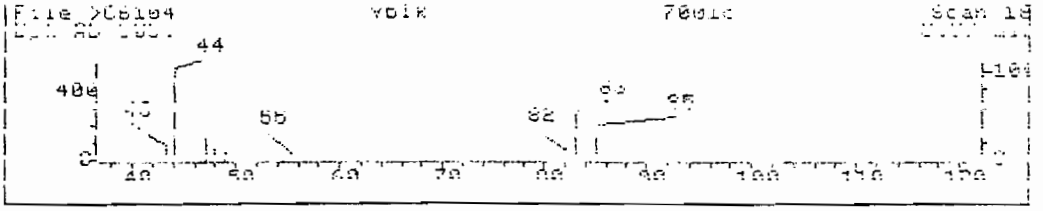
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNFILTERED)



Data File: >CB1104:05
Name: vb1k
Misc: 700ic
Quant Time: 010409 12:57
Injected at: **0409 12:13
Last Qcal Time: **0409 11:44

Quant Output File: ^CB1104:Q1
Instrument ID: 2801 C
Quant ID File: ID59IC::MT
Last Calibration: 000810 08:11

Compound No : 18
Compound Name : Chloroform
Scan Number : 181
Retention Time: 8.97 min.
Quant Ion : 83.0
Area : 4007
Concentration : 2.42 ug
q-value : 96

MS data file header from : >CM104::03

Sample: vblk Operator: MANAGER SUPER GRP. 4/0 01 12: >
Misc : 7001c
Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7001 C
Method file: METH03 Tuning file: M19803 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	>30.	>30.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0

>CM104 vblk 7001c
40.01 250.0 CLP 1IC
Upslope: .2000 Area Reject: 21645. Max Peaks: > Bunch: -1 Valley >100 %
Unslope: 0.0000 Results File ICM104 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	3.24	14	22	70	30727	85>>10	813953	100.00	86.4-7
2	11.52	244	246	268	2331	109761	45>90	5.58	4.821
3	22.17	538	547	555	8258	15>>53	82223	10.10	8.7>5

Sum of corrected areas: 941566.

Summary of Unknowns PPM Library Search and Quantitation

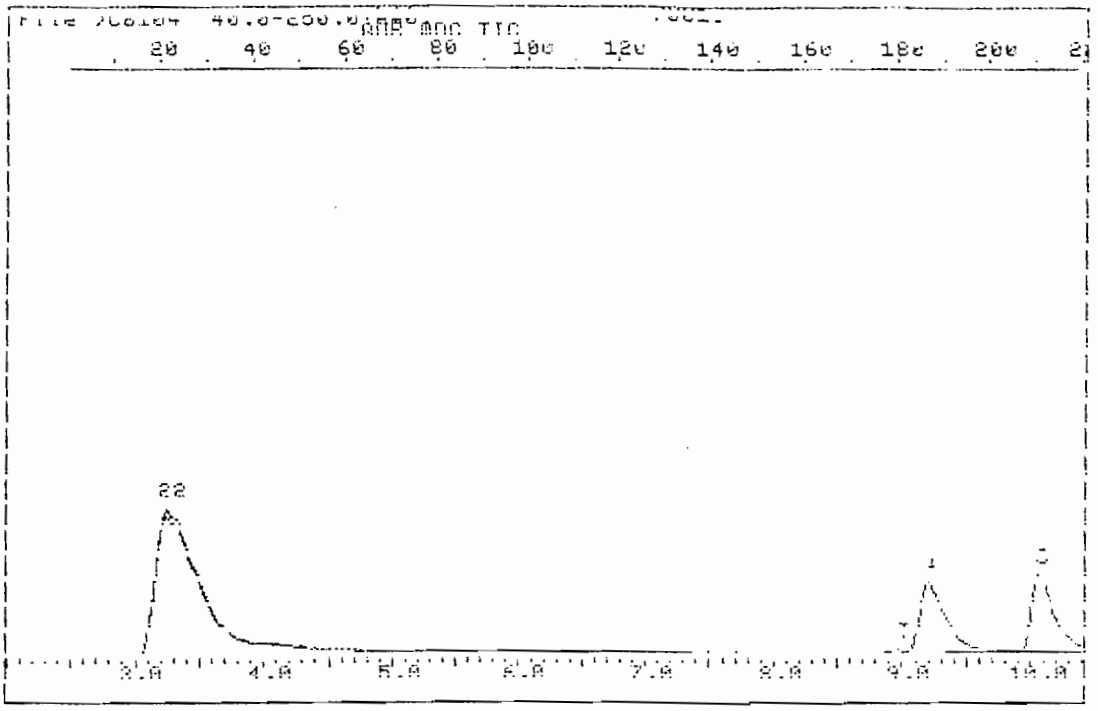
Standard	Concentration	Area	Retention time	Unknown Window
1	50.0	21>452.	9.19	7.49 - 9.9
2	50.0	610573.	10.63	9.91 - 13.59
3	50.0	662630.	16.15	13.59 - 27.05

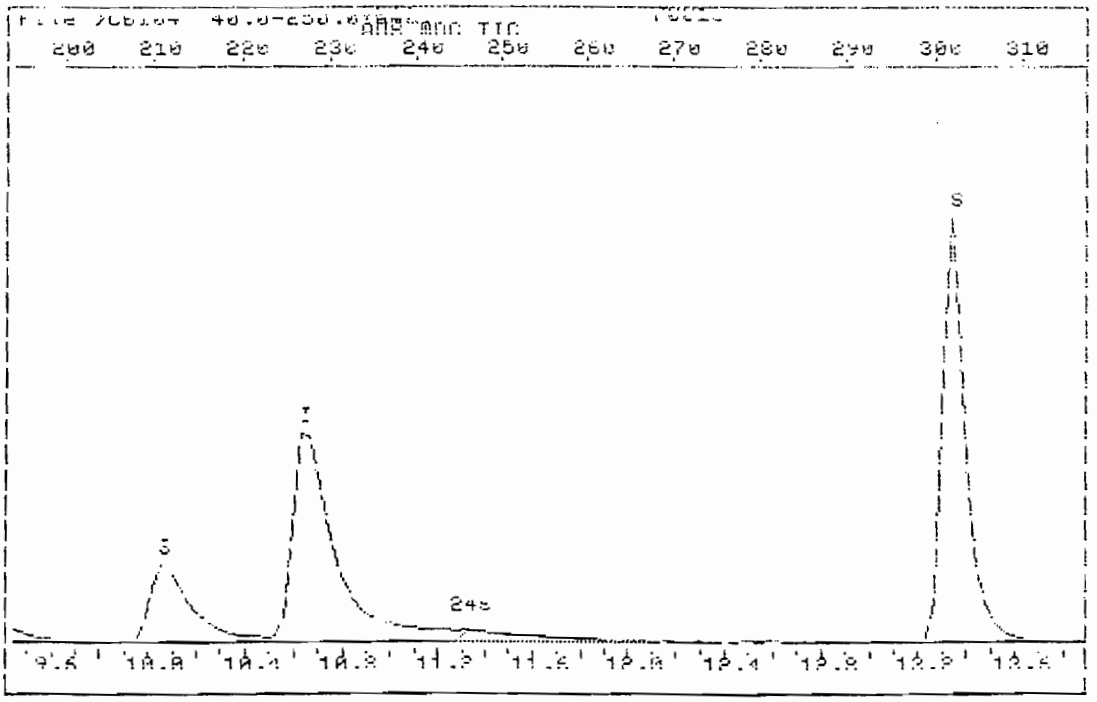
Dilution Factor = 1.00 This sample was 1000.00 g or mL

Correction Factor = 1.00

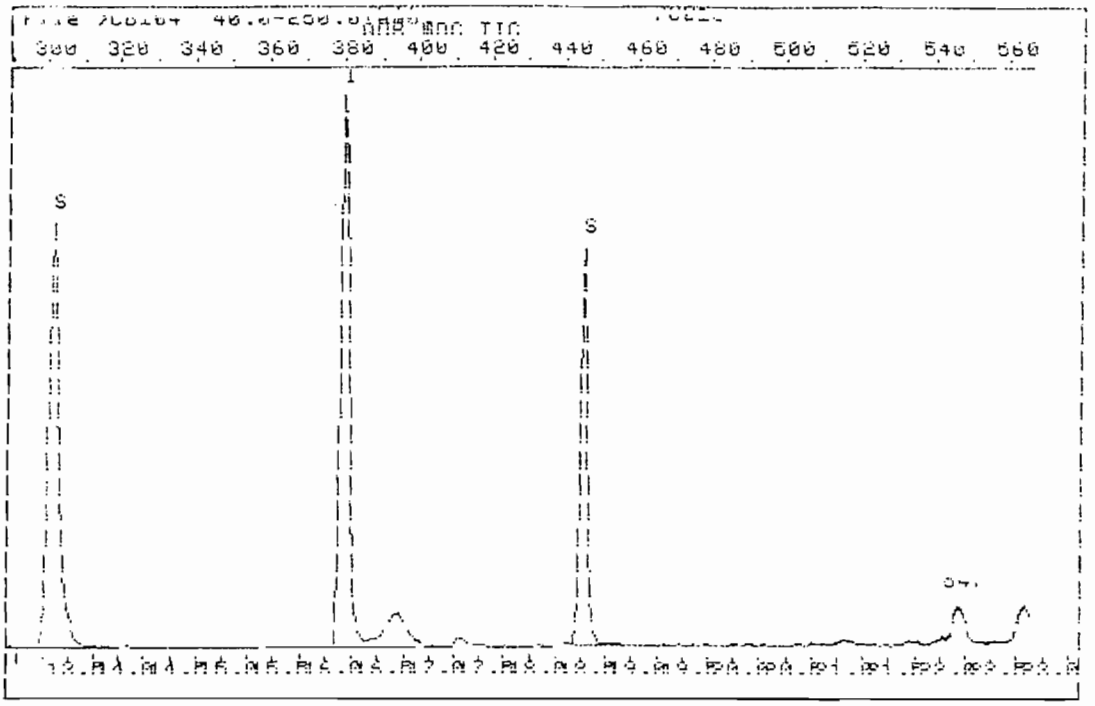
$$\text{Unknown Concentration} = \frac{|\text{Conc Int Std} * \text{Area Unknown}|}{|\text{Area Int Std}|} * \text{Correction Factor}$$

12:00 PM TUE., 8 MAY , 2001

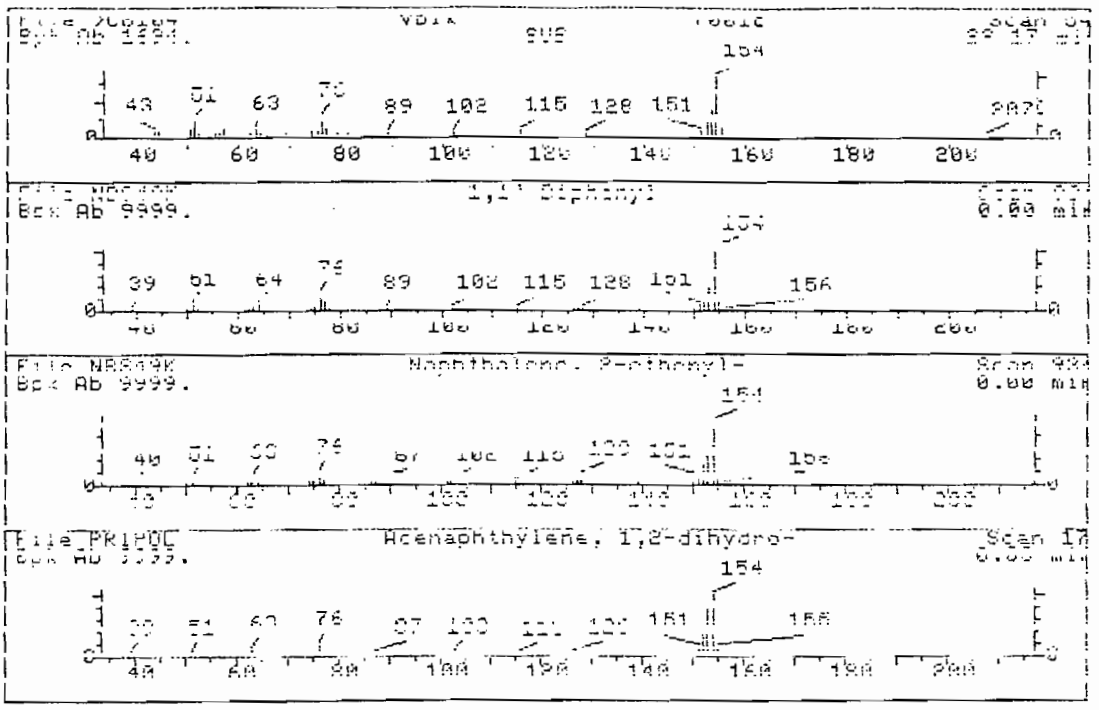




Instrument ID: 7001 Analyzed on: 4/09/01 12:15



Instrument ID: 7011t Analyzed on: 4/19/11 12:15



Instrument ID: 7001 Analyzed on: 4/09/01 12:13
Result 2 in PBM results file: CB104
Retention Time: 22.17 Area: 82223 Tentative Conc: 6.00
The unknown area is 12.41% of the nearest internal standard

1.	1,1'-Biphenyl	154 C12H10
2.	Naphthalene, 2-ethenyl-	154 C12H10
3.	Acenaphthylene, 1,2-dihydro-	154 C12H10
4.	Acenaphthylene, 1,2-dihydro-	154 C12H10
5.	Acenaphthene (8CI)	154 C12H10
6.	Acenaphthylene, 1,2-dihydro-	154 C12H10

Clover not Real

Sample file: >CB104 Spectrum #: 547
Search speed: 1 Tilting option: N No. of ion ranges searched: 47

	Prob.	CAS #	CON #	ROUT	K	DK	#HIG	TILT	%	CON	C I R IO
1.	84*	92524	20173	NBS49K	67	53	1	0	100	8	55 nn
2.	67*	827543	20176	NBS49K	49	52	2	0	89	13	34 22
3.	38*	170	262	PRIPOL	39	60	1	0	57	35	16 21
4.	35*	168	260	PRIPOL	53	52	3	0	100	34	12
5.	32*	83329	20175	NBS49K	45	60	2	0	75	34	12
6.	30*	171	263	PRIPOL	43	58	3	0	100	31	12 --

1A

EPA SAMPLE NO.

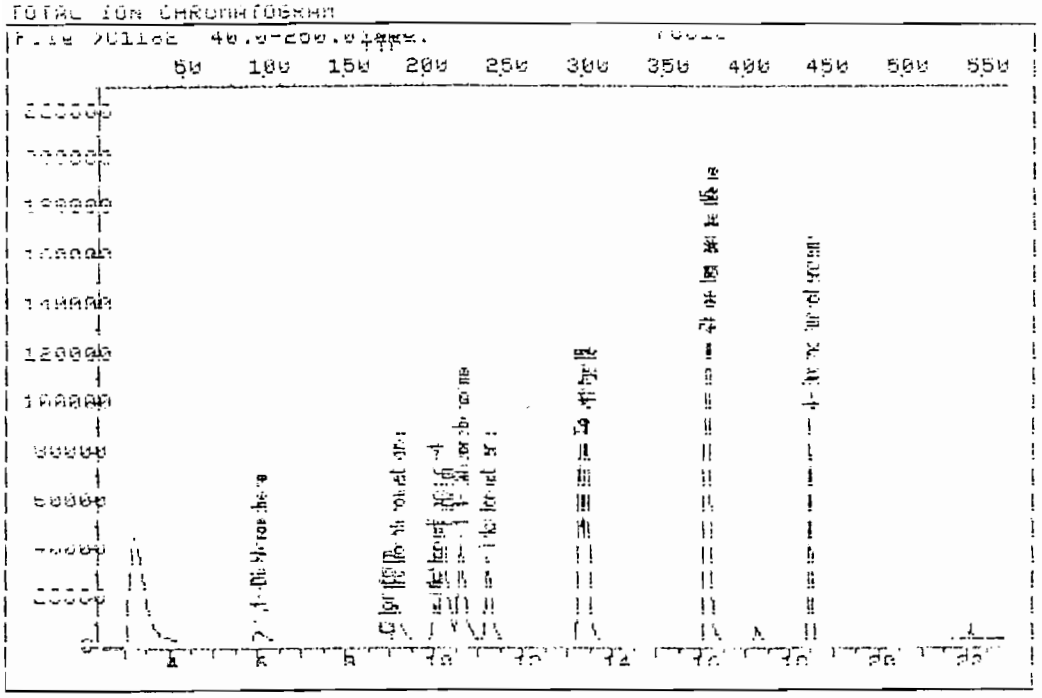
VOLATILE ORGANICS ANALYSIS DATA SHEET

VMSB

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: VMSB
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1182
Level: (low/med) LOW Date Received: 03/30/01
% Moisture: not dec._____ Date Analyzed: 04/07/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	51.	
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	2.	BJ
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	55.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	58.	
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	57.	
108-90-7	Chlorobenzene	58.	
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	10.	U

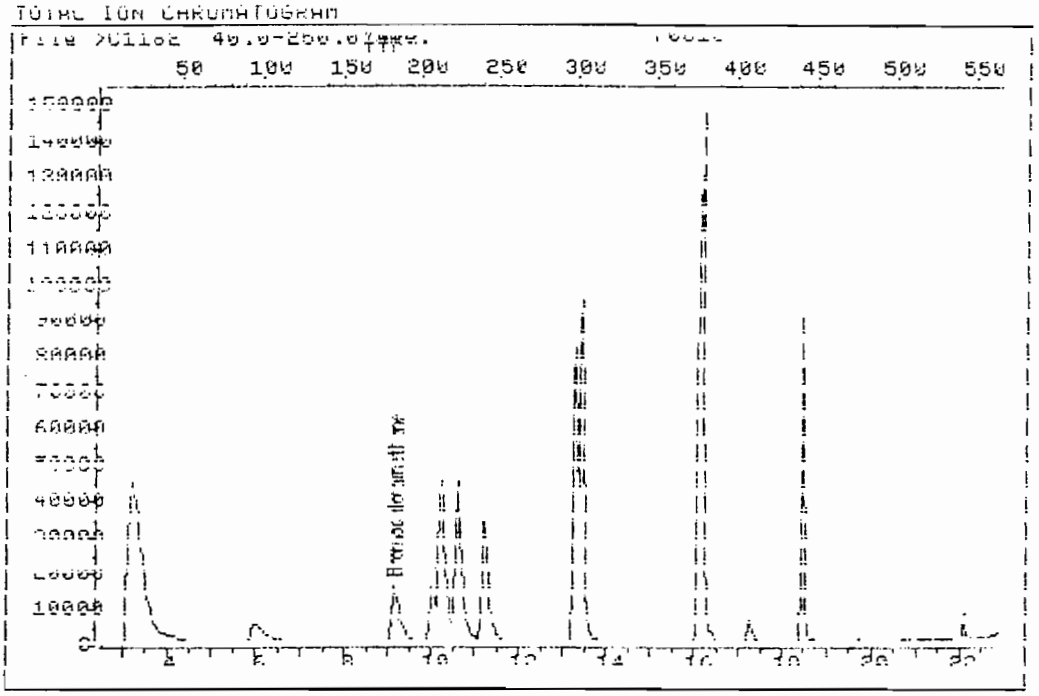
TOTAL ION CHROMATOGRAM



Data File: >C:\182::03 Quant Output File: ^C:\182::QT
Name: vmsb Instrument ID: >001 :.
Misc: 7001c

Id File: ID591C:::.
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:51 Last Mcal Time: **0407 1::-4

Operator ID: MANAGER
Quant Time : 010407 16:..
Injected at: **0407 15:59



Data File: >C1182::03
Name: vmsb
Misc: 7001c

Quant Output File: 'C1182::QT
Instrument ID: .301 1.

Id File: IDF113::M1
Title: Freon 113 ID File
Last Calibration: :

Last Ucal Time: **1-07 11:-4

Operator ID: MANAGER
Quant Time : 010423 11:57
Injected at: **0407 15:59

Operator ID: MANAGER Quant Rev: 7 Quant Time: 01/14/87 16:02
Output File: ^C1182::QT Injection at: **/**/** 15:39
Data File: >C1182::D3 Dilution Factor: 1.00000
Name: vmsb Instrument ID: 7000 HP
Misc: 7001c

ID File: ID591C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 00/00/00 08:31 Last Qcal Time: **/**/** 11:44

	Compound	R.T.	Q ion	Area	Conc	Limits	Q
1)	*Bromochloromethane	9.14	128.0	16665	50.00	0%	0
15)	1,1-Dichloroethene	6.00	96.0	13978	50.82	0%	73
18)	Chloroform	8.89	83.0	3520	2.55	0%	0
19)	1,2-Dichloroethane-d4	10.01	65.0	71163	47.07	0%	72
22)	*1,4-Difluorobenzene	10.58	114.0	130789	50.00	0%	0
29)	Trichloroethene	11.20	130.0	39765	54.55	0%	76
32)	Benzene	10.22	78.0	20161	58.06	0%	0
36)	*Chlorobenzene-d5	16.10	117.0	140216	50.00	0%	0
41)	Toluene	13.43	91.0	23796	56.64	0%	0
42)	Toluene d-8	13.29	98.0	184812	51.44	0%	95
43)	Chlorobenzene	16.17	112.0	142411	50.28	0%	0
48)	Bromofluorobenzene	18.44	95.0	82270	51.87	0%	86

* Compound is ISTD

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 01/23 11:57
Output File: 'C1182::QT Injected at: **0407 15:59
Data File: >C1182::03 Dilution Factor: 1.000000
Name: vmsb Instrument ID: 7001 C
Misc: 7001c

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **0407 11:44

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.14	128.0	16597	50.00	ug	7.1

* Compound is ISTD

1A

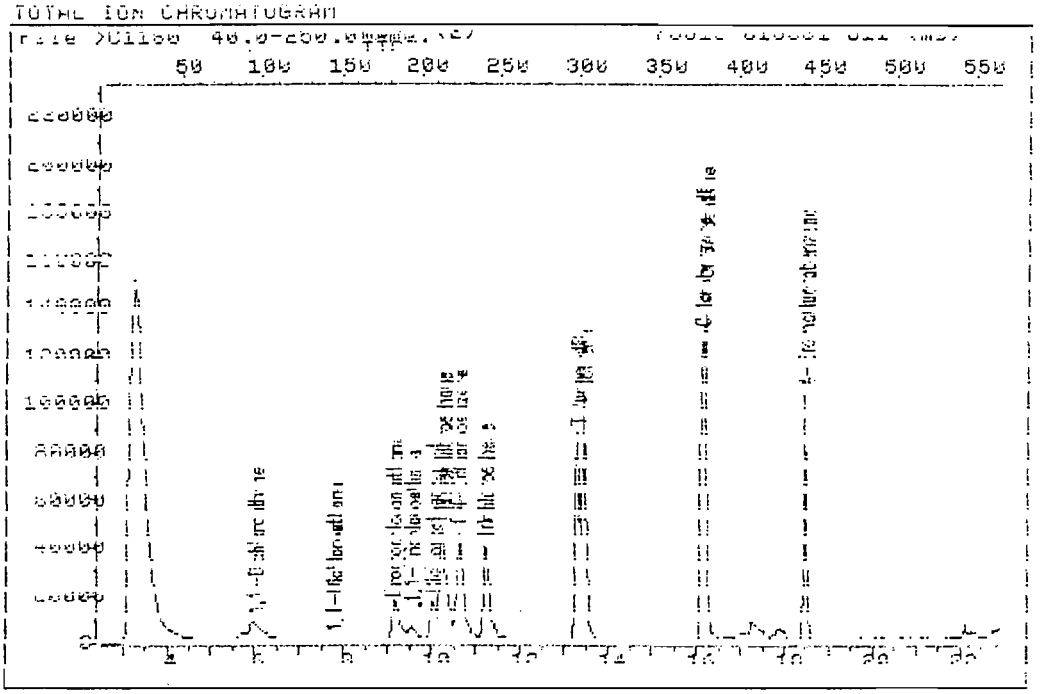
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-9(2) MS

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-9(2) MS
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1180
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/07/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

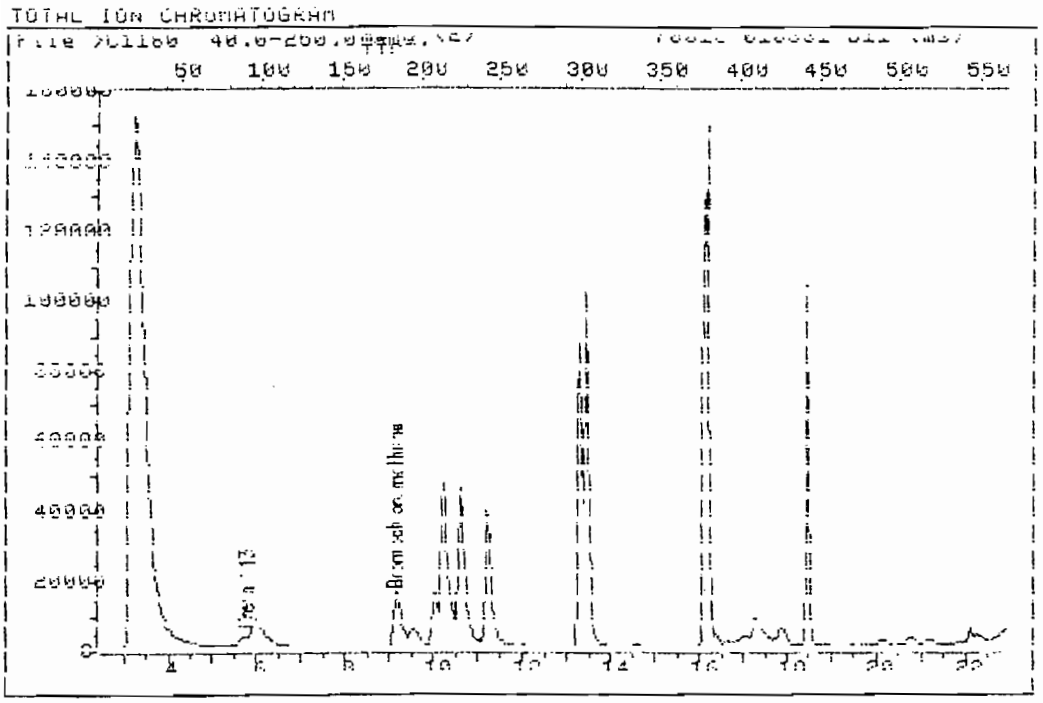
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	57.	
75-34-3	1,1-Dichloroethane	5.	J
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	2.	J
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	14.	
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	58.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	57.	
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	56.	
108-90-7	Chlorobenzene	57.	
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	13.	



Data File: >C:\180::03 Quant Output File: ^C:\180::QT
Name: mw-9 (2) Instrument ID: .101 1.
Misc: 7001c 010331 bll (ms)

Id File: 10591C::MT
Title: HP V0A Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Qcal Time: **0407 1?:-9

Operator ID: MANAGER
Quant Time : 010407 15:.-
Injected at: **0407 14:40



Data File: >C1180::03
Name: mw-9 (2)
Misc: 7001c 010331 b11 (ms)

Quant Output File: 'C1180::QT
Instrument ID: ...01 1.

Id File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: :

Last Qual Time: **-07 11:-4

Operator ID: MANAGER
Quant Time : 010423 11:5
Injected at: **0407 14:40

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 010407 15:14
Output File: ^C1180::QT Injected at: **0407 14:41
Data File: >C1180::03 Dilution Factor: 1.00000
Name: mw-9 (2) Instrument ID: 7001 C
Misc: 7001c 010331 a11 (ms)

IS File: IOS91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:51 Last Qcal Time: **0407 11:44

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	*Bromochloromethane	9.11	128.0	17208	50.00	ug	0
13)	1,1-Dichloroethene	6.01	96.0	152R6	52.28	UG	72
14)	1,1-Dichloroethane	7.27	63.0	4613	4.79	ug	00
19)	1,2-Dichloroethane-d4	10.01	65.0	79299	48.56	UG	73
20)	1,2-Dichloroethane	10.22	62.0	3083	1.63	ug	14
22)	*1,4-Difluorobenzene	10.58	114.0	156348	50.00	UG	97
23)	1,1,1-Trichloroethane	9.54	97.0	18936	14.40	ug	0
29)	Trichloroethene	11.20	130.0	44609	50.44	UG	81
32)	Benzene	10.22	78.0	208641	52.98	ug	0
36)	*Chlorobenzene-d5	16.10	117.0	144489	50.00	UG	94
41)	Toluene	13.43	91.0	249385	50.00	ug	0
42)	Toluene d-8	13.29	98.0	192925	51.40	UG	91
43)	Chlorobenzene	16.17	112.0	146212	52.28	ug	0
48)	Bromofluorobenzene	18.44	95.0	82552	52.72	UG	81

* Compound is ISTD

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 01[illegible]23 11:57
Output File: >C1180::QT Injected at: **1107 14:40
Data File: >C1180::03 Dilution Factor: 1.000000
Name: mw-9 (2) Instrument ID: 7001 C
Misc: 7001c 010331 b11 (ms)

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **1107 11:44

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.11	128.0	17109	50.000	UG	**
2)	Freon 113	5.75	101.0	7253	13.16	UG	95

* Compound is ISTD

1A

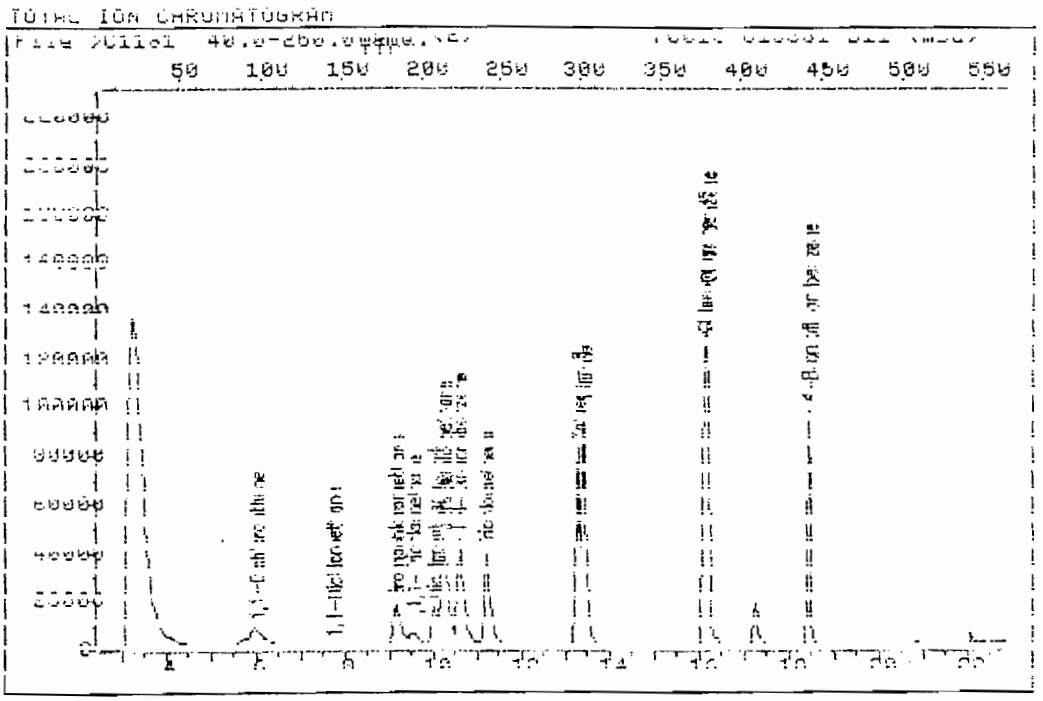
EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-9(2) MSD

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: ETH0105 SAS No.: SDG No.: MW-1
Matrix: (soil/water) WATER Lab Sample ID: MW-9(2) MSD
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C1181
Level: (low/med) LOW Date Received: 03/31/01
% Moisture: not dec._____ Date Analyzed: 04/07/01
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

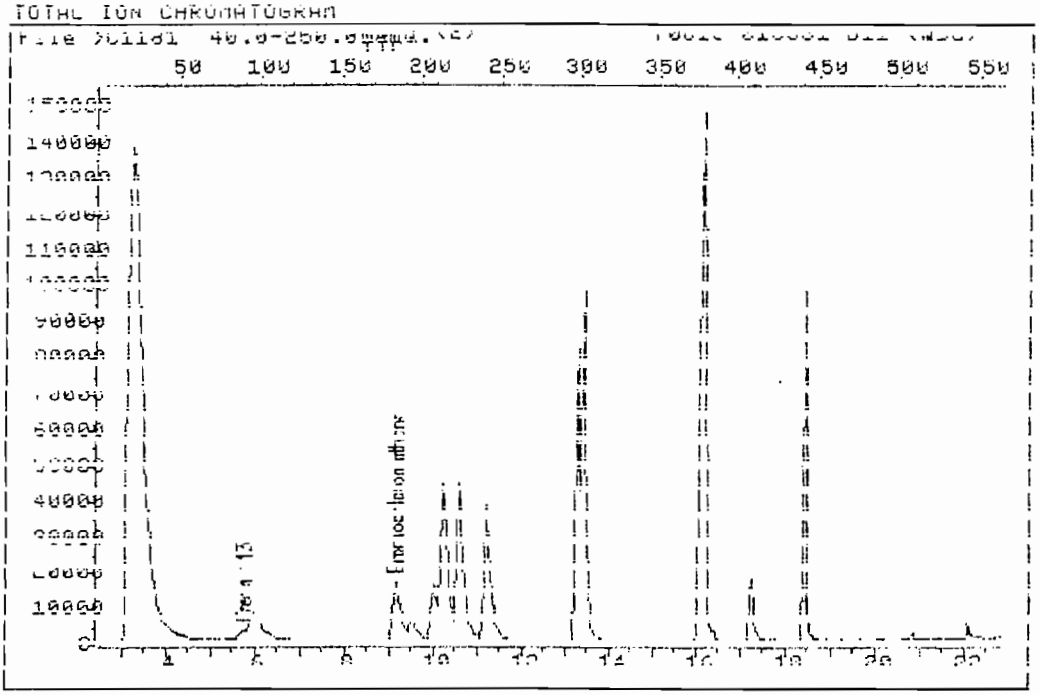
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	55.	
75-34-3	1,1-Dichloroethane	4.	J
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	2.	J
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	14.	
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	59.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	59.	
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	57.	
108-90-7	Chlorobenzene	58.	
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U
76-13-1	Freon 113	11.	



Data File: >C:\181::03 Quant Output File: >C:\181::Q1
Name: mw-9 (2) Instrument ID: >001 <
Misc: 70011c 010331 bil (msn)

Id File: TUS91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 000810 08:31 Last Qcal Time: **0407 11:44

Operator ID: MANAGER
Quant Time : 010407 15:1>
Injected at: **0407 15:09



Data File: >C1181::05
Name: mw-9 (2)
Misc: 7001c 010331 b11 (msd)

Id File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: :

Operator ID: MANAGER
Quant Time : 010423 11:5
Injected at: **0407 15:09

Quant Output File: C1181::QT
Instrument ID: .001 (

Last Qcal Time: **0407 11:4

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 011497 15:??
Output File: ^C1181::QT Injected at: **0407 15:09
Data File: >C1181::03 Dilution Factor: 1.000000
Name: mw-9 (2) Instrument ID: 7001 C
Misc: 7001c 010331 b11 (msd)

ID File: IDS91C::MT
Title: HP VOA Continuing Calibration Standa n
Last Calibration: 000810 08:51 Last Qcal Time: **0407 11:44

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.14	128.0	169811	50.00	UG	97
13)	1,t-Dichloroethene	6.00	96.0	14963	55.02	UG	72
14)	1,1-Dichloroethane	7.24	63.0	4178	4.29	UG	71
19)	1,2-Dichloroethane-d4	10.01	65.0	72686	47.18	UG	73
20)	1,2-Dichloroethane	10.22	62.0	2954	1.58	UG	97
22)	*1,4-Difluorobenzene	10.58	114.0	128789	50.00	UG	96
25)	1,1,1-Trichloroethane	9.54	97.0	17997	14.17	UG	99
29)	Trichloroethene	11.20	130.0	42836	54.42	UG	100
32)	Benzene	10.22	78.0	203202	59.17	UG	97
36)	*Chlorobenzene-d5	16.10	117.0	142224	50.00	UG	93
41)	Toluene	13.43	91.0	241499	56.76	UG	98
42)	Toluene d-8	13.29	98.0	185228	50.97	UG	91
45)	Chlorobenzene	16.17	112.0	142826	57.64	UG	99
48)	Bromofluorobenzene	18.44	95.0	83559	51.81	UG	82

* Compound is ISTD

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 01--23 1:52
Output File: 'C1181::QT Injected at: **0407 15:09
Data File: >C1181::03 Dilution Factor: 1.000000
Name: mw-9 (2) Instrument ID: 7001 C
Misc: 7001c 010331 b11 (msd)

ID File: IDF113::MT
Title: Freon 113 ID File
Last Calibration: : Last Qcal Time: **0407 11:44

	Compound	R.T.	Q ion	Area	Conc	Units	%
1)	*Bromochloromethane	9.14	128.0	16980	50.00	UG	
2)	Freon 113	5.25	101.0	5918	10.82	UG	94

* Compound is ISTD

CLP

SAMPLE CALCULATIONS FOR VOLATILE ORGANICS:

1) **RRF of Trichloroethene from the VSTD050 analyzed on 4/9/01:**

$$= \frac{\text{area of Trichloroethene in std.}}{\text{area of internal std}} \times \frac{\text{concentration of internal standard.}}{\text{concentration of standard}}$$

$$= \frac{47414}{154786} \times \frac{50}{50} = 0.306$$

2) **Amount of Trichloroethene in sample MW-1 (2) (AES sample number 010331B-03):**

$$\text{ug/L} = \frac{\text{area of Trichloroethene in sample}}{\text{area of internal standard in sample}} \times \frac{\text{amount of internal std. (ng)}}{\text{(ml of sample purged)(RRF)}}$$

$$= \frac{23138}{137583} \times \frac{(250)}{(5.0)(0.306)} = 27.48 \text{ ug/L}$$

which is reported as 27 ug/L on the Form I for Volatile Organics

3) **Calculation of spike recovery for Trichloroethene in sample MW-9 (2) MS:**

$$\text{Percent spike recovery} = \frac{\text{quantity determined by analysis}}{\text{quantity added to sample}} \times 100$$

$$\text{\% recovery of Trichloroethene} = \frac{(58.4 - 0.0)}{50.0} \times 100 = 116.8\ \%$$

APPENDIX I

MANIFEST RECORDS – MANAGEMENT OF INVESTIGATIVE-DERIVED WASTE

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: N/A
Manifest Document No.:
2. Page 1 of 1

3. Generator's Name and Mailing Address
Wilsonart International, Inc. c/o Earth Tech
40 British American Blvd., Latham, NY 12110
4. Generator's Phone (518)951-2200 Attn: Will Lindheimer

SITE:
1 Brenner Dr.
Congers, NY 10920

5. Transporter 1 Company Name: St. Joseph Motor Lines
6. US EPA ID Number: P A D 9 8 7 3 5 8 5 8 7
A. Transporter's Phone: (800) 321-2564

7. Transporter 2 Company Name:
8. US EPA ID Number:
B. Transporter's Phone:

9. Designated Facility Name and Site Address
Chemtron Corporation
35850 Schneider Ct.
Avon, OH 44011-1232
10. US EPA ID Number: O H D 0 6 6 0 5 0 6 0 9
C. Facility's Phone: (800) 676-5091

	11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a.	Non RCRA, Non DOT Regulated Material (Waste Water) V20021223A18-A	8	D,M	Est. 440	G
b.	Non RCRA, Non DOT Regulated Material (Soil & Debris) V20021223A19-A	1	D,M	Est. 300	P
c.	Non RCRA, Non DOT Regulated Material (Waste Water & Soil)	—	D,M	Est. —	P
d.					

D. Additional Descriptions for Materials Listed Above
11a. Approval #Q20021204A29
11b. Approval #Q20021204A31
11c. Approval #Q20021204A30

E. Handling Codes for Wastes Listed Above
L

15. Special Handling Instructions and Additional Information

Emergency Contact: CMS (866) 734-2553
Schedule #CT5102

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: William Lindheimer
Signature: William Lindheimer
Month: 12 Day: 16 Year: 02

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: LARRY T. Martin
Signature:
Month: 12 Day: 16 Year: 02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name:
Signature:
Month: Day: Year:

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Karl A. Guenther
Signature: Karl A. Guenther
Month: 12 Day: 23 Year: 02

GENERATOR
TRANSPORTER
FACILITY

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

ORIGINAL – RETURN TO GENERATOR